Going Afoot

Bayard H Christy

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GOING AFOOT

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GOING AFOOT

A Book on Walking

BAYARD H. CHRISTY

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To

GEORGE J. FISHER

AT WHOSE INSTANCE, AND WITH WHOSE KINDLY AID, THESE PAGES WERE WRITTEN

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HOW TO WALK

I have met with but one or two persons in the course of my life who understood the art of Walking, that is, of taking walks,—who had a genius, so to speak, for sauntering, which word is beautifully derived "from idle people who roved about the country, in the Middle Ages, and asked charity, under pretense of going *à la Sainte Terre*," to the Holy Land, till the children exclaimed, "There goes a Sainte-Terrer," a Saunterer, a Holy-Lander. They who never go to the Holy Land in their walks, as they pretend, are indeed mere idlers and vagabonds; but they who do go there are saunterers in the good sense, such as I mean. Some, however, would derive the word from *sans terre*, without land or a home, which, therefore, in the good sense, will mean, having no particular home, but equally at home everywhere. For this is the secret of successful sauntering. He who sits still in a house all the time may be the greatest vagrant of all; but the saunterer, in the good sense, is no more vagrant than the meandering river, which is all the while sedulously seeking the shortest course to the sea. But I prefer the first, which, indeed, is the most probable derivation. For every walk is a sort of crusade, preached by some Peter the Hermit in us, to go forth and reconquer this Holy Land from the hands of the Infidels.

—Henry D. Thoreau, "Walking."

I

HOW TO WALK

Observe the vigorous man as he walks: the stride is long and free; the feet come surely and firmly to the ground, without twist or jar, toes pointed straight ahead; the pelvis, swaying easily, carries an erect body; the arms swing in alternate rhythm with the legs; the head is borne free over all; breathing is deep and long; the blood courses strongly. Every member shares in the activity.

Wearing Apparel

It must be the pedestrian's ideal, when he comes to consider the matters of clothing and burden, in the least possible degree to interfere with these full natural bodily motions: Clothing, while serving its purposes of protection, must not bind nor rub; it may help to maintain, but it may not disturb normal circulation. Burdens must be so imposed as to be sustained with least effort, and to leave the limbs unincumbered.

Footgear is of first importance. If one is to walk comfortably, pleasurably, effectively, the muscles of the feet must have free play; there may be no cramping, straining, nor rubbing; no unnatural position. In Japan the elegant people toddle along in rainy weather upon blocks of wood which raise their dainty slippers above the mud; but your rickshaw runner splashes through the street on soles as pliant as gloves. Shoes and stockings serve but one purpose—that of protection. If roads were smooth and clean,

people who live in temperate climates would go barefoot.

When one walks long and hard, the blood-vessels are distended and the feet increase appreciably in size. More than that, in the act of walking, the forward part of the foot is constantly changing in shape: the toes alternately spread and contract, bend and straighten. The whole supple member is full of muscular activity.

The pedestrian accordingly will not advisedly clothe his feet in cotton stockings and close-fitting shoes, however well made. The consequences of so doing would be rubbing and blisters, impaired circulation and lameness. Nor will he put on canvas shoes, nor heelless shoes, nor rubber-soled shoes, nor shoes with cleats across their soles, such as football players wear.

The best material for *stockings* is wool, and for shoes, leather. The preference for woolen stockings is not primarily because of warmth—even in hottest weather they are preferable. It is because the material is elastic and agreeable to the skin. In winter, warmth is an added advantage; and, when one's footgear is soaked through with water, there is far less danger of taking cold in woolen stockings than in cotton.

Stockings should be bulky and shoes roomy. The layer of knit wool between foot and shoe leather is elastic; it gives the exercising foot free play, cushions the weight of the body, and, by filling all the space, prevents rubbing. The rough bulky stockings known as lumbermen's socks are excellent. If their coarseness is harsh to the skin, finer socks (of cotton, if preferred) may be worn beneath. If the woolen stockings available are light, wear two pairs together. Never wear

a stocking so small or so badly shrunken as to draw or constrain the toes.

Shoes should be roomy. They should when put on over heavy stockings make snug fit about the heel and beneath the arch of the foot, but the forward part should be soft and wide, to give the toes full play. The "sporting" shoes of shops are to be let alone. The army shoes are excellent, both of the Munson and of the Hermann lasts; they have been carefully designed for just such service as the pedestrian requires, and they are most successful. It has just been said that shoes should be large; they should be considerably larger than the wearer's ordinary city shoes, both in length and in width. It is not sufficient to find a shoe which is comfortable in the shop; the shoe may be wide enough, but unless there be some allowance in length, one's toes will, after ten miles of hard walking, be squeezed till they are tender and blistered. A man who ordinarily wears a 9 B, for example, should buy a 9½ D. There should be as much allowance as that, at the least. A roomy shoe, its looseness well filled (though not packed tight) with bulky, springy, coarse wool, coarsely knit, is the very best foot covering. An additional advantage should be mentioned: a tight shoe, retarding circulation, may in extreme wintry weather increase unduly the danger of frosted feet. Heavy stockings and roomy shoes are free of that defect.

There are no water-tight shoes, except in shop windows; and, if there were, they would at the end of a long walk, have become very uncomfortable.

A pair of army shoes should, with proper care, last, without resoling, for 200 to 300 miles of

walking—depending on the roughness of the way, and whether one is "hard on his shoes." If one is planning a longer tour than this, he should provide two pairs of shoes, and wear them on alternate days—a plan which, but for the added weight, would in any case be preferable.

Some men prefer to walk in knickerbockers, others in long trousers (see below). Most of those who prefer long trousers wear shoes with *high tops*, reaching to the middle of the calves, and covering and confining the ends of the trouser legs. Again, bad conditions of footing—such as deep snow, for instance, or bog land, or low dense growth—may render high shoetops advantageous. Low shoes are not advisable under any conditions. For the open road, shoes of ordinary height are best. They should be laced, not buttoned.

For certain kinds of service, shoes should be specially adapted. *Rubber heels* are excellent on macadam roads, but it should be borne in mind that on hard wet surfaces rubber slips. The value of rubber heels is greatest when walking through level, well-settled regions. When they are worn, it is well to carry an extra pair.

Hobnails are to be used only when necessary. Any attachment to, and particularly any excrescence from, the sole of the shoe, is disadvantageous. Iron hobs add appreciably to the weight; and they tend to localize a pressure which should be evenly distributed over the whole sole. For walking in level or in moderately hilly regions, for such simpler mountaineering as consists in traversing highways and mounting wooded slopes, one does not require hobnails; the soles of his shoes should be of plain leather. One should let alone the rubber hobs and inlays, the small scattered spikes, such as he sees attrac-

tively displayed as part of the golfer's outfit. To the pedestrian these things are not worth the fancy prices asked; indeed, they are worth nothing to him. Hobnails, then, must justify themselves in advantages which outweigh their disadvantages; this they do in difficult mountaineering. Worse than useless on the level, they become in the high mountains practically a necessity. For climbing steep slopes, the rock faces and the dense short turf of mountain tops, for scaling precipices of "rotten" rock, for traversing snowfields and icy ledges, one needs to be "rough shod." In the Alps the soles of the mountaineers' shoes are studded all about their rims with *flügelnägel*—great square-headed hobs of iron, with "wings" overlying the edges of the soles. Soft iron proves to be the very best material to give purchase on rock surfaces, whether wet or dry, and on ice and snow, too, it is best. These *flügelnägel*, known as "edging nails," and round hobs for the middle of the sole, called "Swedish hobnails," may be had in this country from dealers in sportsmen's goods.

For mounting icy slopes, steel spikes in leather carriers, called *crampons*, are secured to the feet over one's shoes. These, it is believed, are not now procurable in this country.

For snowshoeing a soft-soled shoe is preferable. Deerskin moccasins are not serviceable for, unless protected by some outer covering, they soon become water-soaked, and then they are worse than useless. Shoepacks are good, and "Barker" shoes better. Barker shoes are made with vamp of rubber and upper of leather. On this subject, see "The Snowshoe Manual," compiled by the Snowshoe Section of the Appalachian Mountain Club.

Special footwear is provided for other particular pursuits: The duck hunter on the tidewater procures hip-boots of rubber; the ski-runner wears shoes of special design, and so does the skater. But here we are in realms of sports other than walking.

Footgear, then, must be comfortable, durable, adequate.

Sufferers from weak or falling arches will wisely modify these suggestions, according to the advice of a reliable orthopedist. Indeed it is well for any one who goes seriously about walking to have his feet examined by a competent adviser, that he may guard against latent defects and prevent difficulty.

Clothing should afford necessary protection; should be light in weight, should be loose, and should be so planned that, as one grows warm in walking, the superfluous may be taken off. It is best that the temperature of the body be kept as nearly even as possible, and there is danger of chill, if one stands in cold wind—as on a mountain top, for instance—while his underclothing is saturated with perspiration. Ordinarily one's clothing will (besides shoes and stockings) include underwear, shirt, trousers, coat, and hat.

In summer, *underwear* has no value for warmth; it should be of cotton, sleeveless, and cut short at the knees. If, however, one is walking in the mountains, or at a cooler season, he will do well to carry with him a flannel undershirt, to wear at the end of the day, when resting. In cool weather light woolen underwear covering both arms and legs is best—and when the thermometer falls low or one is to endure unusual exposure, the underwear should be heavier. Some pedestrians will leave cotton under-

wear out of account altogether, wearing, by preference, light wool, and, on a very hot day, none.

The *shirt* should be of flannel, light or heavy, according to season. In milder weather, cotton shirts, such as the khaki-colored ones worn in the army and procurable at army supply stores, are good. On a summer walking tour it is well to provide one's self with one cotton shirt and one of flannel. The collarband should be large; collar and cuffs should be of one piece with the shirt.

In the matter of *trousers*, one man will prefer long ones; another, short.

Knickerbockers, for summer wear, should be of khaki (or of one of the various close-woven cotton fabrics which pass under that name; a material called "cold stream duck" is good), or of jean; for winter, they may be of corduroy or of woolen goods. The army breeches, narrowed at the knee, and laced close to the calf of the leg, are riding breeches, really; and, while fairly good, they are not of best design for walking, since they restrain somewhat free movement of the knee. Knickerbockers should be full at the knee, and should end in a band to buckle about the leg immediately below the knee joint. Such walking breeches may be had of dealers in sportsmen's goods.

Leggings. If knickerbockers are worn, the calf of the leg should be properly covered. In spite of such disadvantages as those incident to travel on dusty roads and over burr-grown land, long stockings secured at the knee are best for summer wear, without more. Spiral puttees are good in cool weather; in summer they are uncomfortably hot, and even when carefully put on, are somewhat confining. They have one notable

advantage: when used in deep snow they prevent, as no other leggings can, melting snow from running down the legs and into the shoes. For ordinary service the canvas puttees worn in the army are better than the spirals—indeed these canvas puttees are on the whole more satisfactory to the pedestrian than any other covering applied over shoes and stockings. Leather puttees are unnecsarily heavy, and their imperviousness is an actual disadvantage. It is only when traveling through dense undergrowth and briars that leather puttees are really serviceable—and that sort of wear is very hard on the puttees. High shoetops, too, become under such conditions useful, as has already been noted.

In wearing breeches laced about the calf, and in wearing spiral puttees, care should be taken that they do not bind. Many of our soldiers in the recent war suffered from varicose veins, and this was attributed in part to the emergency, that many men unused to physical labor had to carry heavy knapsacks. But it was attributed in part, too, to binding too tightly the muscles of the legs.

For one special service heavy leg covering is desired: To the hunter traversing the swamps and palmetto-grown plains of Florida, there is some danger of snake bites. Ordinarily, apprehensions about snakes are to be laughed at. The feet, ankles, and legs to a point two or three inches above the knees, should be protected. This protection may be effective either by being impenetrable, or by being bulky and thick, or by virtue of both these characteristics. One expedient, now on the market, consists of leggings having an interlining of wire gauze. Another may be improvised: a bulky wrapping of quilted material, incased in tough leggings of leather or

canvas. Care must be taken to protect the ankles below the reach of an ordinary pair of puttees. Any covering such as here suggested must in the nature of the case be heavy and uncomfortable, and will not be worn unnecessarily. One can only say for it, that it is better than a snake bite.

Long trousers should be of smooth close-woven material, not easily torn by thorns, and, for winter wear particularly, resistant to penetration by wind. The legs of the trousers should be confined within shoetops or leggings. Long stockings are not required, only socks. In long trousers, the knee movement is quite free. This rig is particularly good for rough work.

Some men prefer to wear a *belt;* others, *suspenders.* The drag of long trousers is greater than of knickerbockers, and, generally speaking, the man who wears knickerbockers will prefer a belt; and the man who wears long trousers, suspenders. The belt, when worn, should not be drawn very tight. The best belt is the army belt, of webbing; it should not be unnecessarily long.

In summer a *coat* is needed only when resting, or as protection from rain. On one summer tour, the writer found himself comfortable without a coat, but in its place a *sweater* and a short *rubber shirt,* fitting close at neck and wrists and with wide skirts, to cover man and knapsack together. Such a rubber shirt, called in the supply houses a "fishing shirt," may be had of willow green color, or white or black. A sweater is so convenient to carry, and so comfortable, as to be all but indispensable; but, as protection from rain, the rather expensive, and for all other purposes useless, fishing shirt is by no means a necessity; a canvas coat or the coat of an old

business suit will answer well. One does not walk far in a downpour, and the slight wetting of a passing summer shower will do no harm. In the Tyrol where, before the War, walking as recreation was developed as nowhere else, many pedestrians carried neither coat nor sweater, but a long full *cape* of heavy, close-woven, woolen material; when not needed, the cape is carried hanging over the knapsack. Such a cape serves, in some degree, the purposes of a blanket.

A convenient mode of carrying a coat is described by Mr. William Morris Davis, in "Excursions around Aix-les-Bains" (see Bibliography). Mr. Davis says:

"Clothing should be easy fitting, so that discomfort shall not be added to fatigue. Even in warm weather, a coat will often be wanted on a ridge crest, or mountain top: it can be best carried as follows:—Sew the middle of a 30- or 35-inch piece of strong tape inside of the back of the collar; sew the ends of the tape to the bottom of the arm holes: pass the arms through the loops of the tape, and let the coat hang loosely on the back; it will thus be held so that nothing will fall from the pockets and the arms and hands will be free."

For winter wear, one will dispense with any such garment as a fishing shirt, but will require both coat and sweater. The sweater should be a warm one, and the coat should be, not heavy nor bulky, but windproof rather.

A valuable garment for cold weather is the Alaska "parka," a shirt-like frock, light, windproof, and it may be made storm-proof. Made of heavy denim or of khaki cloth and worn over a sweater, the parka is very satisfactory. De-

scription in detail will be found in *Appalachia*, Vol. XI, No. 3, page 287.

The *hat* should shield a man's head from a driving rain, and, if it be a bald head, from the sun. If the man wears spectacles, the brim of the hat should shield the glass from rain and from the direct rays of the sun. The hat should be small enough and soft enough to be rolled up and tucked away when not needed. An old soft felt hat will do; the crown should be provided with ventilation holes of generous size; a leather sweatband is uncomfortable, particularly in hot weather, and may sometimes cause bothersome infection of a sunburned and abraded brow. The writer has found a white duck hat, its brim faced with green underneath, very serviceable in summer. In tropical countries the familiar pith helmet is an almost necessary protection.

One who wears eyeglasses should be careful to provide himself with *spectacles*, preferably metal-rimmed, and on a long tour will advisedly carry a second pair, and even the prescription. See further regarding spectacles, under the caption, "Colored glasses," page 22.

The choice of *clothing for cold weather* may be governed by these few simple rules: (1) The objective is maximum warmth with minimum weight. (2) The trunk of the body—the spine, particularly—the upper arms, and the thighs should be most warmly protected. (3) Let the clothing be soft and bulky within (of wool chiefly), and externally let it be substantially windproof. The hoods worn by the Eskimos are made of the skins of water-fowl, worn feathered side in. (4) Have no crowding of clothing under the arms. (5) Do not wear long coat-skirts; let the coat be belted at the waist. (6) Protect the

ears, when necessary, with a knitted "helmet," or with a cap having an ear-flap which, when not needed, folds across the crown. (7) Woolen gloves or, better still, mittens should be worn, and, outside of these, if it be very cold, loosely fitting leather mittens. (8) Except in extremely cold weather, do not wear leather garments, nor fur. Even a fur cap is intolerable when one becomes warm in walking.

The *color* of clothing is not unimportant. Whether as naturalist or sportsman one desires to be inconspicuously clad, or as a mere wayfarer on dusty roads he wishes to conceal, so far as may be, the stains of travel, he will choose khaki color, or the olive drab made familiar nowadays in the uniforms of the navy aviators. Gray flannel trousers, a white sweater, a bright-colored necktie, for wear in the evenings, are good as part of the equipment. But to that subject the next chapter will be devoted.

In planning an extended hike one will ordinarily have to reckon on some railway traveling. City clothes may be sent by express to the point where walking ends. Then the return journey may be made comfortably and inconspicuously.

The foregoing notes for men will be found sufficient to indicate what is a suitable *costume for women pedestrians.* With a woman's needs particularly in mind, it should be said that skirts should be short, hanging at least six inches clear of the ground; shoetops may be accordingly higher; and all garments should be loose. When walking in remote regions, many women will prefer to wear knickerbockers rather than skirts, and in mountaineering knickerbockers are requisite. Even bloomers are objectionable. In

such case a woman's costume more nearly approaches that of men.

A girl, writing of a tour upon the Long Trail in Vermont (see page 84), says: "Khaki riding breeches are best, as they are of light weight and briars do not catch on them. I can't picture any one taking the Trail in a skirt."

The Appalachian Mountain Club prescribes a climbing outfit for women in the New England mountains, as follows: High laced boots with Hungarian nails; woolen stockings and underwear, light weight; woolen or khaki waist, skirt, and bloomers; felt hat; leather belt.

And the Alpine Club of Canada publishes this among other notes upon women's costume: "It is the dropping of the waist line down to the hips that is the secret of a woman's wearing her knickerbockers gracefully. The top of the knickerbockers should hang on the point of the hips, with the belt as loose as possible. This makes discarding corsets, which of course is absolutely necessary, most comfortable."

These notes on costume are intended to cover the subject, and to serve as reminder and advice to those contemplating walking tours of all sorts. But the practice of walking as an art and recreation does not by any means require such elaborate preparations. Otherwise, the devotees would be few. For an extended tour, or even for a holiday excursion, one may well give consideration to these many matters; but for a Saturday afternoon walk, it will suffice to put on proper footgear, leave one's overcoat at home, carry a sweater if need be, use forethought about details, and be ready to betake one's self from office to highway, with assurance of comfort and enjoyment. And beyond this, there

still remains to be spoken of the daily round of walking from home to work and back again, from office to restaurant at noon. This daily regimen of walking requires no special costume—admits of none, indeed. It may be that as one is thoughtful to take more steps on the routine path of life, he will give more careful attention to the shoes he buys and to clothes. But let no one close his mind to the subject with the too hasty conclusion that walking requires an impossible amount of special clothing. Any one who cares to, can make any needed modification of his ordinary business costume, without making himself conspicuous, and probably with gain in comfort and consequent well-being.

Equipment

On a one-day excursion, a man will walk unburdened; and, on exceptional longer trips, packhorses may carry the baggage from one camping ground to another; but, ordinarily, on a tour continuing day after day, one will carry on his own back all that he requires. Should his route lie through settled country, where shelter and bed are to be found in farmhouse or wayside inn, the man will travel with lighter load, and with greater freedom and enjoyment; if he must carry his blanket, too, walking becomes harder work. It may be that one will spend his vacation in the woods, and journey partly afoot, partly by canoe. In that case, a good part of his walking will be the arduous toting of *impedimenta* (canoe included) across portages, from one lake or stream to another. Proportionately as his burden is heavier, the sojourner in the wilderness will be disposed so to plan his trip that he may stop for

successive nights at favorite camping places. From these he will make shorter trips, and, unencumbered, climb mountains, perhaps, or explore other parts of the country about.

The bulk of what is carried should be borne on the back. Drinking cup may be hung to the belt; knife, watch, money, and various other small articles will be carried in pockets; map-case, field glasses, or fishing rod may be slung by straps from the shoulders or carried swinging in one's hand, ready for use; but, for the rest, everything should be carried in the knapsack.

In case the pedestrian is traveling in settled country and is not obliged to carry a blanket (and such is by far the freest, pleasantest way to go afoot), the best *knapsack* to be found is of a kind in general use in the Tyrol. It goes under its native German name, *rucksack*. It is a large, square-cornered pocket, 20-24 inches wide and 16-18 deep, made of a light, strong, closely woven, specially treated fabric, of a greenish-gray color, and all but water-proof. The pocket is open at the top, slit a few inches down the outer face, is closed by a drawing string, and a flap buckles down over the gathered mouth. Two straps of adjustable length are secured, each at one end to the upper rim of the sack at the middle point, and at the other end to one of the lower corners. When the filled knapsack is in place, the supporting straps encircle the shoulders of the wearer, the closed mouth lies between the shoulder blades, the bottom corners extend just above the hips, while the weight of the burden, hanging from the shoulders, rests in the curve of the back. Genuine Tyrolean knapsacks are, since the War, no longer procurable in this country; good copies of them are, however, to be

had in our sporting-goods shops. The army knapsack is fairly good.

In case the pedestrian makes his tour in some remote region, where lodging places are not certainly to be found, he will be obliged to carry his blanket, and probably some supply of food. In such case, he will choose a larger knapsack. The sack known as the "Nessmuk" is a good one; and another, somewhat larger, is the "Gardiner." These sacks are neither of them large enough to contain both blanket and the other necessary articles of camping equipment; the blanket should then be rolled and the roll arched upon and secured to the knapsack after the latter has been packed. Grommets sewed to the knapsack afford convenient means for securing the blanket roll in place. A still larger (and heavier) knapsack, large enough to contain one's camp equipment, blanket and all, is called the "Merriam Back Pack." It is recommended by an experienced camper, Mr. Vernon Bailey, chief field naturalist of the U. S. Biological Survey.

In hot weather the knapsack becomes uncomfortably wet with perspiration. *Wicker frames,* sometimes used to hold the sack away from the back to allow circulation of air beneath, are bothersome and uncomfortable.

For carrying heavier burdens short distances, as when making portage on a camping trip, a *pack harness* is used. Its name sufficiently explains its nature. An additional device, called a *tump line,* may, if desired, be bought and used with the pack harness. The tump line is a band which, encircling the load on one's back, passes over the forehead. With its use the muscles of the neck are brought into play, aiding the shoul-

ders and back in carrying. It is astonishing, what an enormous burden a Canadian Indian can manage with the aid of harness and tump line. These articles may be bought at sportsmen's stores, and at the posts of the Hudson's Bay Company, in Canada.

The equipment for a summer walking tour, on which one is not obliged to carry a blanket, should weigh from ten to twenty pounds, according as one carries fewer or more of the unessentials. It is impossible to draw up lists of what is essential and what merely convenient, and have unanimity; one man will discard an article which to another is indispensable; the varying conditions under which journeys are taken will cause the same man to carry different articles at different times. The ensuing lists are intended to be suggestive and reasonably inclusive; for any given walk each individual will reject what he finds dispensable.

Requisites carried in one's pockets: Watch; knife; money; compass; matches; handkerchief.

Requisites carried in the knapsack: Change of underclothes, stockings, and handkerchiefs; toilet articles; mending kit; grease for shoes.

Articles which, though not necessary, are altogether to be desired: Second outer shirt; second pair of walking shoes, particularly if the tour be a long one; sweater; pair of flannel trousers, light socks and shoes (gymnasium slippers are good), and necktie for evening wear; medicaments; notebook and pencil; postcards or stamped envelopes; a book to read.

Articles which may be requisite or desired, according to season or circumstance, to be carried in pocket or knapsack or, some of them, slung from the shoulders ready for use: Colored

glasses; pajamas; head net, as protection against mosquitoes; woolen underclothing; gloves or mittens; knitted helmet; naphtha soap, for washing woolens; map case; canteen; culinary articles; whistle; clothes brush; flashlight.

An indefinitely long list might be made of articles which a man will choose, according to taste and inclination. A bird-lover will carry a pair of binoculars; a collector, his cases; the fisherman, rod and fly-book. Some member of almost every walking party will carry a camera.

Notes upon some of the articles thus far enumerated will be useful:

The *pocketknife* should be large and strong, with one or two blades; leave in the showcase the knife bristling with tools of various kinds; see that the blades are sharp.

Let the *watch* be an inexpensive one; leave the fine watch at home; do not wear a wrist watch, particularly not in warm weather. At the wrists perspiration accumulates and the circulating blood is cooled. Any surface covering at that point, and particularly a close-fitting band, is in hot weather intolerable. But, regardless of season, a wrist watch is in the way, and is sure soon or late to be damaged. For the pedestrian its disadvantages greatly outweigh the small convenience it affords.

The best *moneybag* is a rubber tobacco pouch; a leather bill-folder and its contents will soon be saturated with perspiration.

A *compass* is a requisite in the wilderness, but not elsewhere. Regarding compasses, see further pages 75 and 116.

Matches should be carried in a water-tight case.

Toilet articles will include, at a minimum, soap,

comb, toothbrush and powder. A sponge or wash-rag is desirable. A man who shaves will, unless journeying in the wilderness, carry his razor. The soap may be contained in a box of aluminum or celluloid; the sponge in a sponge bag; the whole may be packed in a handy bag or rolled in a square of cloth and secured with strap or string.

Towel and *pajamas* are not indispensable; because of weight, they should be classed as pedestrian luxuries.

The *mending kit* will include thread, needles, and buttons, and here should be set down safety pins, too, an extra pair of shoestrings, and—if one wears them—an extra pair of rubber heels. A small carborundum whetstone may be well worth the carrying.

The best dressing for leather is mutton tallow. Various *boot greases* of which tallow is the base are on the market; one, called "Touradef," is good. There are lighter animal oils, more easily applied; a good one is called "B-ver" oil. Mineral oils are not so good; "Viscol," the most widely used of these, is sold in cans of convenient size and shape.

Medicaments should be few; a disinfectant (permanganate of potassium in crystalline form, or tablets of Darkin's solution), a cathartic (cascara is best—it may be had in tabloid form, called "Cascaral Compound"), iodine, a box of zinc ointment, a roll of adhesive tape, and a small quantity of absorbent cotton will suffice for casual ailments. If one is going into the wilderness, he may well take a first-aid kit—with knowledge, how to use it—and medicine to deal with more violent sickness; ipecac and calomel. In malaria-infested regions, one should carry

quinine, with directions for administering. Talcum powder and cocoa butter are, in proper time, soothing. Citronella is a defense against mosquitoes; another repellent is a mixture of sweet oil or castor oil, oil of pennyroyal, and tar oil; spirits of ammonia is an antidote to their poison.

As to *reading matter*, each will choose for himself. The book carried may be the Bible, it may be "The Golden Treasury," it may be "The Three Musketeers." Again, it may be a handbook of popular science or a map of the stars.

Regarding *map* and *map case*, see page 75.

Colored glasses. On snowfields, on the seashore, where light is intense, the eyes should be screened. The best material, carefully worked out for this purpose, is Crooks glass. Its virtue lies in this: that it cuts out both the ultra-violet rays and the heat rays at the opposite end of the spectrum. Crooks glass may be had in two grades: Shade A and Shade B. Shade A, having the properties just described, is itself almost colorless; Shade B is colored, and cuts out, in addition, part of the rays of the normal spectrum. Goggles may be had of plain sheets of Crooks glass, and these will serve merely as a screen; but, if one wears glasses anyway, since two pairs worn at once are difficult to manage, it is well to have one's prescription filled in Shade A, and (if one is going to climb snow peaks or walk the seabeach) then a second pair in Shade B. Ordinary colored glasses will serve a passing need; amethyst tint is best.

A *canteen* is requisite in arid regions and when climbing lofty mountains; elsewhere it is sometimes a justified convenience.

The writer well recalls the amazement of two Alpine guides some years ago when, on the top

of a snow peak, hot coffee was produced from a thermos bottle. He hastens to add that the thermos bottle was not his; he regards such an article as a sure mark of the tenderfoot.

Even though one be traveling light, the pleasures of a summer holiday may be widened by providing one meal a day and eating it out of doors. In order to accomplish this, one needs to carry a few *culinary articles:* A drinking cup, of course—that is carried in any case, conveniently hung to the belt. Then one should have plate, knife, fork, spoon, a small pail, perhaps a small frying pan, canisters of salt and pepper, a box of tea, a bag of sugar, a receptacle for butter. Most of these articles, and some toilet articles as well, may be had made of aluminum. Do not carry glassware, it is heavy and breakable. Don't carry anything easily broken or easily put out of order. But even here make exceptions. For example, a butter *jar* is better than a butter *box.* The writer, for one, despises an aluminum drinking cup; when filled with hot coffee it is unapproachable, when cool enough not to burn the lips the coffee is too cold to be palatable; he, therefore, in spite of its weight, chooses to carry an earthenware cup.

A *whistle* will have value chiefly for signaling between members of a party.

A party of two, three, or four will carry more conveniences than a man journeying alone. For illustration, in the party, one camera is enough, one map case, one pail, one butter jar; and these may be distributed, so that, while carrying only part, each member of the party may enjoy all. With a camera in the party, a supply of films will be stowed away in a knapsack; a light, collapsible tripod may be worth the taking, if one

cares to secure pictures under poor conditions of light.

Two usual items of an amateur equipment, better left at home, are a *hatchet* and a *pedometer*. A hatchet is of no value, except in the wilderness, and not always is it worth carrying even there. Ordinarily a stout, sharp knife will answer every purpose. When one is on a camping trip on which he makes long stops, he will care for something better than a hatchet—a light axe. Regarding the uses of a pedometer see page 116.

If the contemplated tour lies through the wilderness, and accommodations for the night are not to be had under roofs along the way, one must carry his *blanket*. The blanket should be selected with lightness and warmth in view. The army blankets are fair, but softer, lighter, warmer ones may be had. Blankets should be of generous dimensions. A large double blanket should not exceed eight pounds in weight, and single blankets should weigh half as much. The Hudson's Bay blankets are justly famous.

A blanket enveloped in a windproof *blanket cloth* is very much warmer than if not so shielded. Herein lies the virtue of a sleeping bag. Similarly, a tent—particularly a small one, for one or two men—keeps out wind and retains warm air. With the use of a tent, the weight of blankets may be less. The blanket cloth serves both to keep the wind from penetrating the blanket and also to keep the blanket dry. It prevents penetration of moisture from the ground; and, if one is not otherwise protected, it shields one from dew and from light rain. The blanket cloth, too, must be of the least weight consistent with service. Because of weight, rubber blankets

and oiled ponchos are out of the question. Better light oilcloth, or, better still, the material called "balloon silk" (really finely woven, long-fiber cotton) filled with water-proofing substance. "Tanalite" is the trade name for a waterproof material of this sort of a dark brown color. A tarpaulin seven feet square made of tanalite is, all things considered, the most serviceable blanket cloth. With blanket and tarpaulin, one's pack should not exceed 25-30 pounds in weight. A mode of rolling blanket and tarpaulin and of securing the roll to the knapsack is suggested on page 18.

Blanket pins are worth carrying. By using them one may keep himself snug, nearly as well as in a sleeping bag.

A small cotton bag, useful in a pack, may be stuffed with clothing and serve as a pillow.

A satisfactory *sleeping bag* will hardly be found in the shops; those that are serviceable are too heavy for the pedestrian. And yet the idea embodied in the sleeping bag, the idea of attaining maximum warmth from the materials used, jumps precisely with the pedestrian's needs.

The difficulty with the sleeping bags on the market is that they are made for gentlemen campers, and not for those who take up their beds and walk. For one thing, the gentleman camper has abundance of clothing, with changes of all kinds. But the pedestrian sleeps in his clothes. Of course he does. It would be folly for him to carry in his pack the equivalent of what he wears on his back. His day clothes should be serviceable as night clothes, too. All he need carry is the additional protection required when he is resting on the ground in the colder night hours. And, in addition, he will have a change

of the garments which lie next his skin; but no more. If when sleeping a man is not wearing all that he carries, then he is carrying more than is necessary. He may, indeed, have stuffed in his pack woolen underclothes, for night wear only. For another thing, in making choice between one material and another, the weight of the material is important in far greater degree to the walker than to the gentleman camper. With these considerations in mind, the pedestrian contrives his sleeping bag of the lightest material available to serve the ends in view.

Essentially, a sleeping bag is a closed covering of two layers: an inner layer of heat-insulating material, and an outer layer of water-tight, wind-tight material. Even the gentleman camper, scornfully referred to above, chooses the lightest, warmest blankets he can find; the pedestrian can do no better. However, he does not take so many. But, respecting the outer covering, the pedestrian refuses the heavy waterproofed duck of the ordinary sleeping bag, and selects instead water-proofed balloon silk.

The simplest sleeping bag may be made by folding a six by six wool blanket within a cover of water-proofed balloon silk and sewing together the bottom edges, and the side edges, too, from the bottom upward, to within a foot or so of the top. The bag measures approximately three feet by six, and should not weigh more than five and one half pounds.

Instead of the blanket, other material may be used. Men differ in the amount of covering they require; and then there are the inequalities of climate and season to be reckoned with. A suitable material, lighter than wool and affording less warmth, is sateen; a somewhat warmer, some-

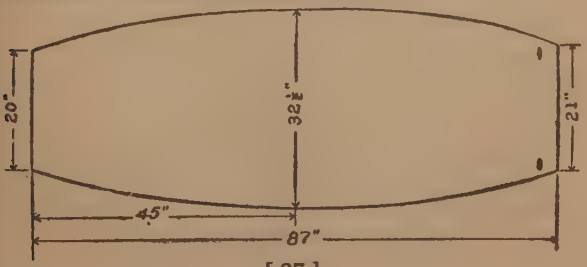
what heavier, substitute for the wool blanket is a down quilt. When still greater warmth is needed the blanket may be double, or blanket and down quilt may be combined.

A rectangular bag, such as that just described, may be criticized in two particulars: for one thing, it is not long enough for a man of good stature, and, for another thing, there is waste material in it. It would be just as warm and just as serviceable if, instead of being three feet wide at the bottom, it were at that point only two feet wide.

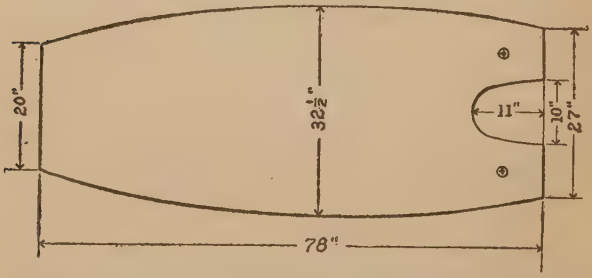
The specifications of an excellent sleeping bag for pedestrian use are given in a pamphlet published by the Appalachian Mountain Club, "Equipment for Mountain Climbing and Camping," by Allen H. Bent, Ralph Lawson, and Percival Sayward, and with the courteous assent of the designers, are here incorporated.

A bag made on the dimensions given is suitable for a man five feet eleven inches tall.

A strip of the material for the inner layer is cut to the pattern indicated below. It is 87 inches long, and at its widest point 32½ inches across. The widest point is 45 inches from the foot. At the foot the strip is 20 inches wide, and at the head, 21 inches. The sides are outwardly curved. This is the *under* strip.



A second *upper* strip is, in over-all dimensions, a duplicate of the first, but for the fact that it is 9 inches shorter. From the foot up and for a length of 78 inches it is identical with the first strip, but at that point it is cut short. A face opening is cut in the upper edge of the second strip, 10 inches across and 11 inches deep.



These two strips are superposed and their overlying edges are sewed together. All edges are properly hemmed or bound.

As the user lies in the bag, his feet just reaching the bottom, his face is encircled in the face opening. The excess length of the under strip then becomes a flap, to fold over his head. Buttons and buttonholes may be provided, as indicated in the drawings, to secure the flap in such position.

The material for the outer layer is cut to the same pattern, with sufficient enlargement of dimensions to allow the outer bag to contain the inner bag and cover it smoothly.

The outer material will preferably be waterproofed balloon silk ("tanalite"); the inner material may be sateen, or blanketing, or down quilt. The designers suggest still another material: Australian wool wadding, encased in sateen.

They say, "a brown sateen material is the best covering, as a very finely woven goods is necessary to keep the wool from working through. The bag does not need to be quilted, but should be 'tied through' about every six inches."

The balloon silk outer bag should weigh about one and one-quarter pounds; the bag of sateen should weigh about two and one-quarter pounds. C. F. Hovey Co., 33 Summer St., Boston, and the Abercrombie & Fitch Co., Madison Ave. and Forty-fifth St., New York, have made bags to these specifications.

It remains only to add a word respecting the outer cover of balloon silk. Balloon silk, which in reality is a fine-woven cotton, is, relatively speaking, a delicate material, and furthermore it is not perfectly water-tight. The great advantage of lightness justifies its use. But the bag must be carefully handled, and after hard service the cover must be renewed.

Dr. Charles W. Townsend, of Boston, an experienced camper, writes:

"The sleeping bag is a home-made affair, that takes up only a small part of the room in a rucksack, and weighs four pounds. It is made of lamb's wool wadding, lined with sateen, and covered with flannel. It is about six and one-half feet long and tapers, so as to be wider at the mouth than at the foot. With ordinary clothing, I have slept warm in it with a temperature of forty degrees. I have also a balloon-silk cover, which can be arranged to guy-ropes, to make a lean-to tent over my head, and gauze curtains for insects. I think that weighs two and one-half pounds."

A *tent* will be carried when the route lies through unsettled country. In a sparsely settled

region, one will run the risk of heavy rain for a night or two, rather than bother with a tent; but in the wilderness, a tent is a necessity, for even such a tarpaulin as has been described as a suitable blanket cover, is not perfectly water-tight. One cannot sleep out in a driving rain storm. At a pinch, of course, one can make shift, and perhaps under rock ledge or shelter of boughs keep fairly dry; but after a wet night in the open, one needs assured protection the second night. The lightest tents are made of balloon silk; they weigh four pounds and upwards. Two men traveling together will have a tent in common and will distribute and equalize their burdens. As has been said, a tent affords warmth (particularly when carefully pitched, with a view to making it wind-tight) and, accordingly, blankets need not be so heavy. Though waterproofed balloon silk is not perfectly water-tight, one may keep perfectly dry in a balloon silk tarpaulin or sleeping bag, within a balloon silk tent.

A note on *sleeping out* is proper. In summer, when there is no rain, one should sleep under the open sky; he should choose as his sleeping place an exposed ridge, high and dry. In such a situation he will suffer least annoyance from mosquitoes, and, if the night be cool, he will be warmer than in the valley. Seldom in temperate climates is the night too warm for sleeping out of doors; but even on such a night the air on the hilltop is fresher. If it be windy, a windbreak may be made of boughs or of cornstalks (on a cool night in autumn a corn-shock may be made into a fairly comfortable shelter.) In case the evening threatens rain, one may well seek a barn for protection; if one is in the wilderness, he will search out an overhanging rock, or build

a lean-to of bark or boughs. Newspaper is a good heat insulator, and newspapers spread on the ground where one is to lie make the bed a warmer, drier one. Newspaper will protect one's blanket from dew. Be careful when lying down to see that shoes and clothing are under cover. If the night proves to be colder than one has anticipated and one's blanket is insufficient (or if, on another tour, the days are so hot that walking ceases to be a pleasure—though they have to be *very* hot for that), it may be expedient, at a pinch, to walk by night and rest by day.

Such *food* as must be carried will be selected to save weight, so far as is consistent with nutriment. Rolled oats are excellent; so also is soup powder (put up in "sausage" form, imitating the famous German *erbswurst*), and dried fruits and vegetables, powdered eggs, and powdered milk. The value of pemmican is known. All these articles may be obtained at groceries and at sportsmen's stores. Seldom, however, will one wander so far as to be for many days beyond the possibility of buying food of more familiar form. Shelled nuts, raisins, dried fruit, malted milk tablets, and lime juice tablets are good to carry on an all-day excursion. *Food bags* of "paraffined" cotton fabric will prove useful. It is well to bear in mind that food may be distributed along the way, sent in advance by mail, to await at post offices one's coming.

The special equipment of the mountaineer—alpenstock, ice axe, rope, *crampons*, *scarpetti*, etc.—need only be mentioned. They are not needed in climbing the mountains of eastern America, but only on giddy peaks, snowfields, and glaciers. Those interested will consult the works on mountaineering mentioned in the Bibliography.

From the pages of a pamphlet of the Appalachian Mountain Club this note is taken:

"Equipment does not end with the purchase of proper food, clothing, climbing and camping outfit. The prospective climber should give some thought to his physical and mental equipment. A strong heart, good lungs, and a reasonable amount of physical development and endurance are among the requisites and so, too, are courage, caution, patience and good nature. If in addition he is interested in topography, geology, photography, animal or plant life, by so much the more is his equipment, and consequently his enjoyment, increased."

Care of Body and Equipment

As to speed of walking and distance, see below, page 51; as to preliminary walking, in preparation for a tour, see page 53.

One hardly needs the admonitions, eat plain food, sleep long, and keep body and clothing clean. The matter of *food* becomes complicated when one has to carry the supply of a day or two or of several days with him. Be careful to get, so far as possible, a large proportion of vegetable food—fresh vegetables and fruit.

When walking, the system requires large amounts of water, and, generally speaking, one should *drink* freely. If one stops by a roadside spring on a hot day, he should rest a few minutes before drinking, and, if the water be very cold, he should drink sparingly. It is refreshing before drinking, and sometimes instead of drinking, to rinse mouth and throat with spring water. In the Alps the guides caution one not to drink snow water. In settled regions, drink boiled water only, unless assured of the purity of the

source. Beware of wells. It is a matter of safety, when traveling, to be inoculated against typhoid fever. Practice restraint in the use of ice cream, soda water, sweets, coffee, and tea.

The pedestrian should be careful to get as much *sleep* as normally he requires at home, and somewhat more. He may not be so regular in hours, for he will find himself inclined to sleep an hour at midday, and at times to walk under the starlight, to be abroad in the dawn. And a walking tour would be a humdrum affair, if he did not yield to such inclination.

A *bath* at the end of the day—a sponge bath, if no better offers—is an indispensable comfort. While on the march one will come upon inviting places to bathe. Bathe before eating, not immediately after. If the water is very cold, it is well to splash and rub one's body before plunging in. If much bathing tends to produce lassitude, one should limit himself to what is necessary.

Don't overdo; on the march, when *tired out*, stop at the first opportunity—don't keep going merely to make a record. Don't invite fatigue. If, in hot weather, free perspiration should fail, stop immediately and take available measures to restore normal circulation.

Lameness in muscles is due to the accumulation of waste matter in the tissues; elimination may be aided and lameness speedily relieved by drinking hot water freely and by soaking one's body in a warm bath: the internal processes are accelerated, in freer blood circulation, while much is dissolved out through the pores of the skin. At the end of a long hard walk, the most refreshing thing is a drink—not of ice water, not of soda water, but a pint or so of hot water. Rubbing oil as a remedy for lame muscles is hardly worth

carrying; alcohol is a mistake. Bruised muscles should be painted lightly with iodine.

Care of feet. Always wash the feet thoroughly at the end of a tramp, and dry carefully, particularly between the toes. If the skin cracks and splits between the toes, wash at night with boric acid and soften with vaseline. It is better to allow toenails to grow rather long, and in trimming cut them straight across.

When resting at noon take off shoes and stockings, and, before putting them on again, turn the stockings inside out. If the weather be mild, let the feet remain bare until about to set out again; if there be water available, bathe the feet immediately on stopping. If, on the march, the arch of the foot should grow tired, consciously "toe in."

If there is rubbing, binding, squeezing, with consequent tenderness at any point, stop at once, take off shoe and stocking, and consider what is to be done. It may suffice to protect the tender spot, applying a shred of absorbent cotton secured with a strip of adhesive tape; perhaps the thickness of the stocking may be changed, or the lacing of the shoe be eased or tightened. By *tighter* lacing sometimes the play of the foot within the shoe may be diminished and undesirable rubbing or squeezing overcome. Talcum powder sprinkled on the foot will help to relieve rubbing, and soap rubbed on the stocking outside, above the tender place, is efficacious.

Sometimes, in spite of forethought, one may find one's self walking in ill-fitting shoes; for example, the shoes though broad enough may be too short, and one's toes in consequence may be cramped and squeezed in the toe of the shoe—particularly on down grades—until they become tender and even blistered. If then other expe-

dients fail, one has to examine his shoe carefully, determine precisely where the line of binding strain lies, and then—remembering that the shoe as it is, is worthless to him—slit leather and lining through, in a line transverse to the line of strain.

Should a blister, in spite of care, develop, let it alone, if possible. Don't interfere with nature's remedial processes. But, if one must go on walking with the expectation that the blister unless attended to will tear open, then one should drain it—not by pricking it through, however. Take a bright needle, sterilize it in the flame of a match, and run it under the skin from a point to one side, and so tap the blister. Then cover the area with adhesive tape. If there is abrasion, paint the spot with iodine, or apply a few crystals of permanganate of potassium and a drop or two of water, then cover with absorbent cotton and adhesive tape.

Be careful, on setting out in the morning, that any soreness or lameness of the preceding day has been met by the measures described.

Corns are caused by wearing tight or ill-fitting shoes. If one has a corn, he should get rid of it before attempting distance walking, and should thereafter wear shoes such as to assure him immunity.

For *sunburn*, use talcum powder or cocoa butter. Do not expose large areas of the body to sunburn.

A *cramp* in the side may easily be relieved by drawing and retaining a deep breath, and bending over.

The *bowels* should be kept open, and will be, if one orders his food aright. Constipation is to be carefully guarded against. One may, in spite of

himself, after hard walking in hot weather, find difficulty. A harmless emergency relief is an enema of a few ounces of the colorless inert oil now sold under such names as "Russian" oil and "Nujol" (the Standard Oil Company's preparation).

Medicines are to be used only in emergency: cascara for constipation, or, in case of a sudden violent onset of illness, calomel; capsicum plaster for internal inflammation. But hot water within and without will generally relieve distress, and is the best remedy. But *do not experiment;* if a physician is available, call him.

Ammonia is an antidote for insect stings.

Snake-bites are, newspaper reports to the contrary, very, very rare. The bite of a poisonous serpent (rattlesnake or copperhead) requires heroic treatment. Suck the wound, cut it out immediately with a sharp knife, fill the incision with permanganate of potassium crystals and drop water upon the permanganate.

Care of clothing. Underclothes and stockings worn today may be washed tomorrow at the noon hour. Shirt, trousers—and underclothing too—should go to the tub every few days, as opportunity offers.

Shoes should be cleaned each day, washed in cold water and greased. If wet they should be carefully dried in gentle heat. Leather is easily ruined by scorching; never dry a shoe in heat unendurable to the hand. Shoes packed in newspaper overnight will be measurably dried by absorption. Keep the leather pliant with grease or oil, but not saturated. If one is going to walk through bogs, or in shallow water, then his shoes should be copiously oiled, but ordinarily one should oil his shoes with sparing hand.

Companions

Dr. Finley, President of the University of the State of New York, and Commissioner of Education, finely says:[1] "It is figurative language, of course, to speak of God's 'walking' with man. But I do not know where to find a better expression for the companionship which one enjoys when walking alone on the earth. I should not speak of this if I thought it was an experience for the patriarchs alone or for the few. A man does not know one of the greatest satisfactions of life if he has not had such walks."

The prophets of the cult—Hazlitt and Stevenson—are quite eloquent on the point, that the first joys of walking are reserved for those who walk alone; even Emerson cynically observes that a dog may on occasion be better company than a man. But the solitary Thoreau admits that he sometimes has a companion, while sociable Lawrence Sterne prettily says, "Let me have a companion of my way, were it but to remark how the shadows lengthen as the sun declines."

Ordinarily, we prefer—most of us—to walk in company; if the tour is an extended one, continuing through many days, we certainly do. And nothing is more important than the choice of companions. A mistake here may be a kill-joy. Daily, hourly intercourse rubs individuality upon individuality, till every oddity, every sensitive point, is worn to the quick. Be forewarned, then, and be sure of one's companions. Conversely, let a man be sure of himself, resolutely refusing to find offense, or to lose kindliness, good humor, and good will. "'Tis the best of humanity," says Emerson, "that goes out to walk."

[1] The *Youth's Companion*, Aug. 31, 1911.

A common interest in things seen, stimulated perhaps by reading matter carried along, may be the selective process in making up a party; but friendship underlies all.

A proved company of two, three, or four is best. With greater numbers, the party loses intimacy and coherence; furthermore, if dependent on hospitality by the way, difficulties arise. A housewife who willingly provides for two, may hesitate to entertain six.

If there be one in the party who has an aptitude for it, let him keep a *journal* (in the form of letters home, perhaps). Such a record, illustrated by photographs, is a souvenir to afford long-continued delight.

When walking in out-of-the-way places it is the part of prudence always to have a companion; for, otherwise, in case of mishap, a man might be in sorry plight, or even in actual danger.

WHEN TO WALK

THE VAGABOND[1]

Give me the life I love,
  Let the lave go by me,
Give the jolly heaven above
  And the byway nigh me.
Bed in the bush with stars to see,
  Bread I dip in the river—
There's the life for a man like me,
  There's the life for ever.

Let the blow fall soon or late,
  Let what will be o'er me;
Give the face of earth around
  And the road before me.
Wealth I seek not, hope nor love,
  Nor a friend to know me;
All I seek the heaven above
  And the road below me.

Or let autumn fall on me
  Where afield I linger,
Silencing the bird on tree,
  Biting the blue finger.
White as meal the frosty field—
  Warm the fireside haven—
Not to autumn will I yield,
  Not to winter even!

Let the blow fall soon or late,
  Let what will be o'er me;
Give the face of earth around
  And the road before me.
Wealth I ask not, hope nor love,
  Nor a friend to know me.
All I ask the heaven above
  And the road below me.

Robert Louis Stevenson.

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[1]From "Poems and Ballads," by Robert Louis Stevenson; copyright 1895, 1913, by Charles Scribner's Sons.

II

WHEN TO WALK

Any day—every day, if that were possible. Says Thoreau, "I think that I cannot preserve my health and spirits, unless I spend four hours a day at least [in the open]"; and, again, he says of himself that he cannot stay in his chamber for a single day "without acquiring some rust."

Recall Thoreau's Journals. Their perennial charm lies largely in this, that he is abroad winter and summer, at seedtime and at harvest, in sun and rain, making his shrewd observations, finding that upon which his poetic fancy may play, finding the point of departure for his Excursions in Philosophy.

At What Season

"The first care of a man settling in the country should be to open the face of the earth to himself by a little knowledge of Nature, or a great deal, if he can; of birds, plants, rocks, astronomy; in short, the art of taking a walk. This will draw the sting out of frost, dreariness out of November and March, and the drowsiness out of August."

—Ralph Waldo Emerson, "Resources."

The Daily Walk. Walking is to be commended, not as a holiday pastime, merely, but as part of the routine of life, in season and out. Particularly to city-dwellers, to men whose occupations are sedentary, is walking to be commended as recreation. Will a man assert himself too busy?—his neighbor plays a game of golf a week; he himself, perhaps, if he will admit it,

is giving half a day a week to some pastime—may be a less wholesome one.

It is worth a man's while to reckon on his walking every day in the week. It may well be to his advantage, in health and happiness, to extend his daily routine afoot—perhaps by dispensing with the services of a "jitney" from the suburban station to his residence, perhaps by leaving the train or street car a station farther from home, perhaps by walking down town to his office each morning.

The Weekly Walk. The environs of one's home can scarcely be too forbidding. A range of ten miles out from Concord village satisfied Thoreau throughout life. Grant the surroundings of Concord exceptional—Thoreau's demands were exceptional. Those who will turn these pages will be for the most part city folk; the resident of any of our cities may, with the aid of trolley, railway, and steamboat, discover for himself a dozen ten-mile walks in its environs—many of them converging to his home, some macadam paved and so available even in the muddy season, and any one of them possible on a Saturday or a Sunday afternoon.

What could a pedestrian ask more? A three-hour walk of a Saturday afternoon—exploring, perhaps, some region of humble historic interest, studying outcroppings of coal or limestone, making new acquaintance with birds, bees, and flowers, and enjoying always the wide sky, the sweep of the river, the blue horizon. No other recreation is comparable to this.

It is pleasurable to walk in fair, mild weather; but there is pleasure on gray, cold, rainy days, too. To exert the body, to pit one's strength against the wind's, to cause the sluggish blood to

stream warm against a nipping cold, to feel the sting of sleet on one's face—to bring all one's being to hearty, healthful activity—by such means one comes to the end, bringing to his refreshment gusto, to his repose contentment.

The consistent pedestrian will score to his credit, every week throughout the year, ten miles of vigorous, sustained tramping. Five hundred miles a year makes an impressive showing, and is efficacious: it goes far to "slam the door in the doctor's nose."

The Walking Tour. Apart from, or, better, in addition to the perennial weekly walking about one's home, there is the occasional walking tour: a two or three-day hike, over Labor Day, perhaps, or Washington's Birthday; and then there is the longer vacation tour of two or three weeks' duration.

With important exceptions, we, in our northern latitudes, arrange our walking tours in summer time. And, so far as concerns the exceptions, it will here suffice to remind ourselves of mountain climbing on snowshoes in winter, of ski-running and skating, and of the winter carnivals of sport held in the Adirondacks, in the Alps, and in the Rocky Mountains. In our southern states, however, no disadvantage attaches to winter; to the contrary, over a great part of that region, winter is the pleasanter season for the pedestrian. But summer is the season of vacations, and is, generally speaking, the time of good roads, fair skies, and gentle air. Then one can walk with greatest ease and freedom.

The choice of the particular fortnight for the "big hike" may be governed by all sorts of considerations; if the expedition be ornithological, and there is free choice, it will be taken in May

or June, or perhaps in September; if to climb Mt. Ktaadn, it will preferably be in August. Again, one's employer may, for his own reasons, fix the time. It is well, therefore, to formulate general statements, helpful in making choice of place, when once the season has been fixed.

In early summer, from the time the snow melts till mid July, the north woods are infested with buzzing, stinging, torturing mosquitoes; to induce one to brave these pests, large countervailing inducements must needs appear. Mountaineering in temperate latitudes is less advisable in the early summer than later; there is more rain then, and nights are cold, and, in the high mountains, soft snow is often an impedance. Throughout much of our country, June is a rainy month. In May and June, accordingly, and early July, one should by preference plan his walk in open settled country, in the foothills of mountain ranges, or across such pleasant regions as central New York or Wisconsin.

Late July, August and September are, for the most part, hot and dusty. At that season, accordingly, the great river basins and wide plains should be avoided; one should choose rather the north woods, the mountains, or the New England coast.

For the pedestrian September in the mountains and October everywhere are the crown of the year; the fires of summer are then burning low, storms are infrequent, the nip in the air stirs one to eagerness for the wide sky and the open road.

"The world has nothing to offer more rich and entertaining than the days which October always brings us, when after the first frosts, a steady shower of gold falls in the strong south wind

from the chestnuts, maples and hickories: all the trees are wind-harps, filling the air with music; and all men become poets, and walk to the measure of rhymes they make or remember."

—Ralph Waldo Emerson, "Country Life."

If one is so fortunate as to have his holiday abroad, he will find the Italian hills or the Riviera delightful either in early spring or in late autumn; he will find the Alps at their best in midsummer; and, at intermediate seasons, there remain the Black Forest and the regions of the Seine, the Rhine, and the Elbe. As for Scotland and Ireland, no one has ventured to say when the rains are fewest.

The Hours of the Day

"Can you hear what the morning says to you, and believe *that?* Can you bring home the summits of Wachusett, Greylock, and the New Hampshire hills?"

—Ralph Waldo Emerson, "Country Life."

It is well, and altogether pleasantest, on the hike, to be under way early in the morning; and sometimes—particularly if the day's march be short—to finish all, without prolonged stop. Ordinarily, it is preferable to walk till eleven or twelve o'clock, then to rest, wash clothing, have lunch, read, sleep, and, setting out again in the middle of the afternoon, to complete the day's stage by five or six o'clock. Afterward come bath, clean clothes, the evening meal, rest, and an early bed.

But one's schedule should not be inflexible; one should have acquaintance with the dawn, he should know the voices of the night. One forgets how many stars there are, till he finds him-

self abroad at night in clear mountain air. An all-night walk is a wonderful experience, particularly under a full moon; and, in intensely hot weather, a plan to walk by night may be a very grateful arrangement.

Dr. John H. Finley, of the University of the State of New York, writes in the *Outlook*[2] reminiscently of walking by night:

"But the walks which I most enjoy, in retrospect at any rate, are those taken at night. Then one makes one's own landscape with only the help of the moon or stars or the distant lights of a city, or with one's unaided imagination if the sky is filled with cloud.

"The next better thing to the democracy of a road by day is the monarchy of a road by night, when one has one's own terrestrial way under guidance of a Providence that is nearer. It was in the 'cool of the day' that the Almighty is pictured as walking in the garden, but I have most often met him on the road by night.

"Several times I have walked down Staten Island and across New Jersey to Princeton 'after dark,' the destination being a particularly attractive feature of this walk. But I enjoy also the journeys that are made in strange places where one knows neither the way nor the destination, except from a map or the advice of signboard or kilometer posts (which one reads by the flame of a match, or, where that is wanting, sometimes by following the letters and figures on a post with one's fingers), or the information, usually inaccurate, of some other wayfarer. Most of these journeys have been made of a necessity that has prevented my making them by day, but I have in every case been grateful afterward for the necessity. In this country they have been usually among the mountains—the Green Moun-

[2]Issue of April 25, 1917.

tains or the White Mountains or the Catskills. But of all my night faring, a night on the moors of Scotland is the most impressive and memorable, though without incident. No mountain landscape is to me more awesome than the moorlands by night, or more alluring than the moorlands by day when the heather is in bloom. Perhaps this is only the ancestors speaking again.

"But something besides ancestry must account for the others. Indeed, in spite of it, I was drawn one night to Assisi, where St. Francis had lived. Late in the evening I started on to Foligno in order to take a train in to Rome for Easter morning. I followed a white road that wound around the hills, through silent clusters of cottages tightly shut up with only a slit of light visible now and then, meeting not a human being along the way save three somber figures accompanying an ox cart, a man at the head of the oxen and a man and a woman at the tail of the cart—a theme for Millet. (I asked in broken Italian how far it was to Foligno, and the answer was, *'Una hora'*—distance in time and not in miles.) Off in the night I could see the lights of Perugia, and some time after midnight I began to see the lights of Foligno—of Perugia and Foligno, where Raphael had wandered and painted. The adventure of it all was that when I reached Foligno I found that it was a walled town, that the gate was shut, and that I had neither passport nor intelligible speech. There is an interesting walking sequel to this journey. I carried that night a wooden water-bottle, such as the Italian soldiers used to carry, filling it from the fountain at the gate of Assisi before starting. Just a month later, under the same full moon, I was walking between midnight and morning in New Hampshire. I had the same water-bottle and stopped at a spring to fill it. When I turned the bottle upside down, a few drops of water from the fountain of Assisi fell

into the New England spring, which for me, at any rate, has been forever sweetened by this association.

"All my long night walks seem to me now as but preparation for one which I was obliged to make at the outbreak of the war in Europe. I had crossed the Channel from England to France, on the day that war was declared by England, to get a boy of ten years out of the war zone. I got as far by rail as a town between Arras and Amiens, where I expected to take a train on a branch road toward Dieppe; but late in the afternoon I was informed that the scheduled train had been canceled and that there might not be another for twenty-four hours, if then. Automobiles were not to be had even if I had been able to pay for one. So I set out at dusk on foot toward Dieppe, which was forty miles or more distant. The experiences of that night would in themselves make one willing to practice walking for years in order to be able to walk through such a night in whose dawn all Europe waked to war. There was the quiet, serious gathering of the soldiers at the place of rendezvous; there were the all-night preparations of the peasants along the way to meet the new conditions; there was the pelting storm from which I sought shelter in the niches for statues in the walls of an abandoned château; there was the clatter of the hurrying feet of soldiers or gendarmes who properly arrested the wanderer, searched him, took him to a guard-house, and detained him until certain that he was an American citizen and a friend of France, when he was let go on his way with a *'Bon voyage';* there was the never-to-be-forgotten dawn upon the harvest fields in which only old men, women, and children were at work; there was the gathering of the peasants with commandeered horses and carts in the beautiful park on the water-front at Dieppe; and there was much besides; but they were experiences for the

most part which only one on foot could have had."

In answer to a request for a contribution to this handbook, Dr. Finley replies generously, and to the point:

"I have never till now, so far as I can recall, tried to set down in order my reasons for walking by night. Nor am I aware of having given specific reasons even to myself. It has been sufficient that I have enjoyed this sort of vagrancy. But since it has been asked, I will try to analyze the enjoyment.

"1. The roads are generally freer for pedestrians by night. One is not so often pushed off into the ditch or into the weeds at the roadside. There is not so much of dust thrown into one's face or of smells into one's nostrils. More than this (a psychological and not a physical reason) one is not made conscious by night of the contempt or disdain of the automobilist, which really contributes much to the discomfort of a sensitive traveler on foot by day. I have ridden enough in an automobile to know what the general automobile attitude toward a pedestrian is.

"2. Many landscapes are more beautiful and alluring by moonlight or by starlight than by sunlight. The old Crusader's song intimates this: 'Fair is the sunlight; fairer still the moonlight and all the twinkling starry host.' And nowhere in the world have I appreciated this more fully than out in Asia Minor, Syria, and Palestine, where the Crusaders and Pilgrims walked by night as well as by day. But I have particularly agreeable memories, too, of the night landscapes in the Green Mountains.

"3. By night one is free to have for companions of the way whom one will out of any age or clime, while by day one is usually compelled, even when one walks alone, to choose only from the living and the visible. In Palestine, for ex-

ample, I was free to walk with prophet, priest, and king by night, while by day the roads were filled with Anzacs and Gurkhas and Sikhs, and the like. Spirits walk by day, but it takes more effort of the imagination to find them and detach them. One of my most delightful night memories is of a journey on foot over a road from Assisi that St. Francis must have often trod.

"4. There is always the possibility of adventure by night. Nothing can be long or definitely expected, and so the unexpected is always happening. I have been 'apprehended'—I do not like to say 'arrested'—several times when walking alone at night. Once, in France, I was seized in the street of a village through which I was passing with no ill intent, taken to a guardhouse and searched. But that was the night of the day that war was declared. Once, and this was before the war, I was held up in Rahway, toward midnight, when I was walking to Princeton. I was under suspicion simply because I was walking, and walking soberly, in the middle of the road.

"5. By day one must be conscious of the physical earth about one, even if there is no living humanity. By night, particularly if one is walking in strange places, one may take a universe view of things. Especially is this true if the stars are ahead of one and over one.

"6. Then it is worth while occasionally to see the whole circle of a twenty-four hour day, and especially to walk into a dawn and see 'the eyelids of the day.' I had the rare fortune to be on the road in France when the dawn came that woke all Europe to war. And I was again on the road one dawn when the war was coming to its end out in the East.

"7. There are as many good reasons for walking by night as by day. But no better reason

than that one who loves to walk by night can never fear the shadow of death.

"You will ask if I have any directions to give. I regret to say that I have not. I seldom walk with else than a stick, a canteen of water, and a little dried fruit in my pocket—and a box of matches, for sometimes it is convenient to be able to read signboards and kilometer posts even by night."

Speed and Distance

Stevenson speaks contemptuously of "the championship walker in purple stockings," and indeed it is well to heed moderate counsel, lest, in enthusiasm for *walking*, one misses after all the supreme joys of a *walk*. At the same time, there is danger of too little as well as of too much. To loiter and dilly-dally (to borrow again Stevenson's phrase) changes a walk into something else—something more like a picnic.

Really to walk one should travel with swinging stride and at a good round pace. Ten or twenty miles covered vigorously are not half so wearying to body nor to mind as when dawdled through. One need not be "a champion walker in purple stockings" covering five miles an hour and fifty miles a day.

If one is traveling without burden, he should do three and a half to four miles an hour; if he carries twenty pounds, his pace should be not more than three and a half; and if he carries thirty, it should be three miles an hour, at most. When traveling under a load, one has no mind to run; on an afternoon's ramble, one may run down gentle grades "for the fun of it," but on the hike it is best always to keep one foot on the ground. The perennial, weekly, conditioning

walk should require about three hours; and the distance covered should be at least ten miles. On a tour, continued day after day, one should ordinarily walk for five, six, or seven hours a day, and cover, on the average, fifteen to twenty miles. With three weeks to spare, one has, say, ten to fifteen walking days—rain may interfere, there are things to be seen, one does not want to walk every day. At the average rate of twenty miles a day—which one can easily do under a fifteen-pound pack—the distance covered should be 200 to 250 miles. If one carries thirty pounds, he travels more slowly, and makes side trips, and covers a stretch of say a hundred miles of country.

The figures given are applicable to walking in comparatively level regions; in mountain climbing, of course, they do not hold. To ascend three thousand feet in elevation, at any gradient, is at the least a half-day's work; it may be much more. Furthermore, in mountaineering at great and unaccustomed altitudes—8,000 feet and upwards—great care must be taken against over exertion. One who has had experience in ascending Alpine peaks will remember that, under the leadership of his guides, he was required to stop and rest for fifteen minutes in each hour, to eat an Albert biscuit, and to drink a swallow of tea mixed with red wine.

Professor William Morris Davis, in "Excursions around Aix-les-Bains," gives the following notes upon speed in mountain-climbing:

"While walking up hill, adopt a moderate pace that can be steadily maintained, and keep going. Inexperienced climbers are apt to walk too fast at first and, on feeling the strain of a long ascent, to become discouraged and "give it up"; or if

they persist to the top, they may be tempted to accept bodily fatigue as an excuse for the indolent contemplation of a view, the full enjoyment of which calls for active observation. Let these beginners remember that many others have shared their feelings, but have learned to regard temporary fatigue as a misleading adviser. There is no harm done if one becomes somewhat tired; exhaustion is prevented by reducing the pace when moderate fatigue begins. Let the mind rest on agreeable thoughts while the body is working steadily during a climb; when the summit is reached, let the body rest as comfortably as possible while the mind works actively in a conscious examination of the view. Avoid the error of neglecting the view after making a great effort in attaining the view point.

"An ascent of 400 or 475 m. [1300-1550 feet] an hour may ordinarily be made on a mountain path; where paths are wanting, ascent is much slower; where rock climbing is necessary, slower still. Descent is usually much shortened by cut-offs at zigzags in the path of ascent: the time of descent may be only a half or a third of that required for ascent."

One should not set out on any tour, whether in the mountains or elsewhere, and, without preparation, undertake to do twenty miles a day. During the weeks preceding departure, one should be careful not to miss his ten-mile weekly hike; and he should, if possible, get out twice a week, and lengthen the walks.

In planning his itinerary, he will not fix the average distance and walk up to it each day. Let him go about the matter gradually—fifteen miles the first day, twenty the second; on the third day let him lie by and rest, and on the fourth do twenty again. With the fourth day he will find his troubles ended. The second day is, usu-

ally, the hardest—ankles tired, feet tender, shoulders lame from the burden of the knapsack; but, by sticking at it bravely through the afternoon, the crest of difficulty will be overpassed.

In this matter of speed and distance, figures are to be accepted with freedom. Individuals vary greatly in capacity. The attempt has been made to give fair estimates—a rate and range attainable by a fairly vigorous, active man, with clear gain. The caution should be subscribed, "Do not try to do too much."

Stunt Walking

These are tests of endurance in speed, in distance, or in both; the play of the habitual pedestrian. Discussion of the matters of *speed* and *distance* gives opportunity for the introduction, somewhat illogically, of this and the following sections.

There is, in the environs of a certain city, a walk of ten miles or better, a favorite course with a little company of pedestrians. No month passes that they do not traverse it. Normally, they spend two hours and a half on the way; if some slower-footed friend be of the party, it requires an hour more; their record, made by one of their number, walking alone, is two hours and twelve minutes.

Fired by the example of a distinguished pedestrian, who in the newspapers was reported to have walked seventy-five miles on his seventy-fifth birthday, one of the company just mentioned essayed to do the like—a humbler matter in his own case. He is, however, so far advanced into middle age that he won with a good margin the trophy of the League of Walkers, given to every

member who covers thirty miles afoot in a single day.

CHAMPIONSHIP WALKING—WORLD'S RECORDS

EVENT	TIME	HOLDER	NATION	DATE
1 mile	6m. 25 4-5s.	G. H. Goulding	Canada	June 4, 1901
2 miles	13m. 11 2-5s	G. E. Larner	England	July 13, 1904
3 miles	20m. 25 4-5s.	G. E. Larner	England	Aug. 19, 1905
4 miles	27m. 14s.	G. E. Larner	England	Aug. 19, 1905
5 miles	36m. 1-5s.	G. E. Larner	England	Sept. 30, 1905
6 miles	43m. 26 1-5s.	G. E. Larner	England	Sept. 30, 1905
7 miles	50m. 50 4-5s.	G. E. Larner	England	Sept. 30, 1905
8 miles	58m. 18 2-5s.	G. E. Larner	England	Sept. 30, 1905
9 miles	1h. 7m. 37 4-5s.	G. E. Larner	England	July 17, 1908
10 miles	1h. 15m. 57 2-5s.	G. E. Larner	England	July 17, 1908
15 miles	1h. 59m. 12 3-5s.	H. V. Ross	England	May 20, 1911
20 miles	2h. 47m. 52s.	T. Griffith	England	Dec. 30, 1870
25 miles	3h. 37m. 6 4-5s.	S. C. A. Schofield	England	May 20, 1911
1 hr.	8 miles 438 yards	G. E. Larner	England	Sept. 20, 1905
2 hrs.	15 miles 128 yards	H. V. L. Ross	England	May 20, 1911

Competitive Walking

Mr. George Goulding, the Canadian world's champion, has generously contributed the following paragraphs on Competitive Walking. The definition of a "fair gate," taken by Mr. Goulding for granted, is, "one in which one foot touches the ground before the other leaves it, only one leg being bent in stepping, namely, that which is being put forward."

"In the present mad scramble of the business world, men forget the need of exercise; they are intent on rapid transit, but give little thought to walking. Walking is the natural mode of travel, it is one of the best forms of exercise, and should be engaged in by everyone, and by most people in larger degree.

"If ordinary walking for health and recreation has fallen into disuse, so has speed walking in competition. There are, however, still a few of the old school left, in Weston, O'Leary, Ward, and others, who remind us of the time when the art of fast walking was more highly esteemed in the athletic world.

"You have asked me to give my ideas on fair heel and toe walking for competition, or speed walking, and in replying I ask you at the outset to take Webster's Dictionary from your shelf and see what the definition of *walk* is: 'To proceed [at a slower or faster rate] without running or lifting one foot entirely before the other is set down.' Based on that definition, a set of rules has been drawn up to govern the sport, differentiating a fast walk from a running trot. The chief thing for the novice just starting is to get thoroughly acquainted with the rules and stick to them, never violating them in the slightest.

"I cannot here make minute comment upon all the rules of championship walking, but I will do

my best to bring out in a brief way the essentials. To simplify and make vivid what I have in mind to say, let the reader accompany me to some athletic track and see with me a bunch of walkers in action.

"It is a principle of walking which I have set before myself, to economize effort, to attain maximum speed with minimum expenditure of strength; but you do not see that principle carried out by all the walkers before you on the track. One fellow over there is twisting his body on the back stretch in an awful contortion, showing he is not a natural walker. Another, just behind him, is jumping in a jerky way all the time, owing to the fact that he is not using his hips to advantage. But look at this young chap just taking the turn, how smoothly he works! What freedom of action he has! Look at his hop motion! In order to get a better view, let us step out upon the track. Now see how his hip is brought well round at each stride, the right being stretched out a little to the left, and the left in the next stride to the right, in order that he can bring his feet, one directly in front of the other. Notice that he walks in a perfectly straight line. That is to say, if a direct line were drawn around the track, he would place each foot alternately upon it. Bear in mind that the shortest distance between any two points is a straight line. By this time the walker has passed us, and we get a view of him from the field. In contrast with the other contestants, he does not seem to have any hip action. That is because his stride is perfectly straight, no overlapping; his stride shoots out right from the waist; he gets into it every possible inch, and yet there is no disturbance of the smoothness of his action. And with his perfect stride note how he works his feet to advantage: the right foot comes to the ground heel first, and as the left leg is swung in front of the right, the ball of the right comes down;

then, as the right foot rises to the toe position, the heel of the left strikes the ground and in turn takes the weight of the body. Notice how one foot is on the ground all the time; there is no possibility of a lift. A good test, to judge whether a walker is 'lifting' or not, is to note whether his head moves in a straight line; for, when one lifts, the head moves up and down.

"Now notice the difference in the way the different men 'lock' their knees. The knee should be perfectly straight or 'locked' as the foremost foot reaches the ground, and should continue so through the beginning of the stride. It is easier to reach forward with a straight knee than with a bent one. As the heel comes to contact with the ground, the weight of the body is shifted from the rearward to the forward foot, and the leg that has just swung forward now begins to propel the body. The straightened knee is at this instant locked. The 'lock' should be decided and complete. Remember this clearly, that the knee should be first straight and then locked. A knee bent throughout the stride is not to be approved. The rules call for a fair heel and toe walk, with a stiff knee, and we have got to live up to them.

"With our walkers still in view as they go around the track, let us study their arm motion. Notice how that fellow is slashing away across his chest. That is not necessary. Neither is the action of the man just ahead of him, who is throwing his arms away out laterally from the hips. Now look at the fellow with the freedom of action we have already noted. His arms are fairly low, they do not rise higher than the breast. On the forward swing of his arm the elbow does not pass the hip, and on the backward swing the hand does not pass the hip. The man does not carry corks. (The less concentration of mind upon the action of muscles the better.)

"I think I have illustrated the chief points in-

volved in walking according to the rules laid down. Perhaps a summary of the rules for fair heel and toe walk will be useful:

"Hip motion: Just enough twist or curve given to bring the feet alternately in one straight line.

"Leg action: Below the waist shoot the leg out in a straight clean drive to its full, natural limit: hip locked, knee locked, and free play given the foot.

"Foot action: The heel of the right foot strikes the ground first. As the left leg is swung in front of the right, the foot of the right comes down flat, then, as it is raised to toe position, the heel of the left strikes the ground and in turn takes the weight of the body.

"Carriage of the body: To be perfectly upright, with the center of gravity on the heels, the head all the time traveling in a straight line.

"Knee action: Knee to be straight at first and afterwards locked.

"Arm action: Arms act with the shoulders to give good balance. Keep them fairly low, not ascending any higher than the nipples; good even swing; hand and elbow alternately reaching the hips.

"Hands: Recommended to be kept loose, corks not necessary.

"Having pointed out to you wherein individuals differ, and having indicated what constitutes a fair heel and toe walk, a few hints on training may be helpful. My first advice to any athletic aspirant is to undergo a medical examination, in order to find out if he is strong enough constitutionally to risk strenuous track work without injury to his health. I would further suggest that such an examination be an annual affair.

"What is the purpose of training? We train to gain efficiency in whatever branch of sport we enter. To train properly one must concentrate

attention upon whatever pertains to his particular sport. Through such attention one strengthens the muscles and nerves, gains knowledge of the strength he possesses, so that he can use it in the right way and at the right time, to attain the maximum amount of speed with the minimum amount of effort. Training increases strength of mind, self-confidence, strong nerves, patience, thinking power, and character.

"The amount of track work needed to prepare for a walking-match will depend upon the individual, but remember that staying in bed and reading a set of rules will not do. There is a lot of hard work ahead. To start with, I would never think of entering a race without at least three months' preparation, be it daily or three times per week. A long and careful training is far better than a short and severe one, and so I would recommend easy work for the first month, with a gradual increase of speed as one goes along. Do not bother with a stop watch until the second month at the earliest.

"Let me also suggest that one do a little morning calisthenics. These exercises should focus on developing alertness and endurance; consequently, light, rapid movements that give the muscles tone and firmness are the qualities to seek in such individual exercise.

"I have always found deep breathing a great help when training for a contest. I always practice deep breathing when out for a street walk, inhaling through about eight steps, exhaling for a like period.

"One of the things I learned early in my career was the value of sun baths. The blood needs light, and one needs pure blood to win a race. The direct rays of the sun on one's body will give it. Of course one should use discretion in taking a sun bath.

"One should not forget that he needs a lot of

sleep—eight full hours of it. Sleep is necessary for resting not the body only; it should also be a rest for the mind and the nervous system. Remember that sleep is not mere rest in the sense of inaction; sleep is a vital process in repairing and rebuilding used-up nerve and brain cells, so you see it is essential that the brain be at rest in order to gain full recuperation.

"As one becomes more advanced in the sport he will realize how large a part the mind plays in a race. Mental action has a great deal to do with winning. A man should not be bluffed; let him make up his mind he is going to win, and that he must not get rattled; let him have his thoughts well collected, and he will be all right."

WHERE TO WALK

TREES

I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;

A tree that looks at God all day
And lifts her leafy arms to pray;

A tree that may in Summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain;
Who intimately lives with rain.

Poems are made by fools like me,
But only God can make a tree.

Joyce Kilmer.

III

WHERE TO WALK

Anywhere. Surely the pedestrian may claim for his recreation this advantage: it may be enjoyed when one will and wherever one may be. But this does not mean that there is no choice, no preference. Says Thoreau again, "If you would get exercise, go in search of the springs of life. Think of a man's swinging dumb-bells for his health, when those springs are bubbling up in far-off pastures unsought by him!" And Emerson has this fresh, breezy comment:

"The true naturalist can go wherever woods or waters go; almost where a squirrel or a bee can go, he can; and no man is asked for leave. Sometimes the farmer withstands him in crossing his lots, but 'tis to no purpose; the farmer could as well hope to prevent the sparrows or tortoises. It was their land before it was his, and their title was precedent."

Stevenson would make the surroundings a matter of small import; the landscape, he says, is "quite accessory," and yet, within a page after, he rallies Hazlitt, and playfully calls him an epicure, because he postulates "a *winding* road, and three hours to dinner."

Choice of Surroundings

There is the region about home, the region one knows best. For muddy weather, macadam; but, when they are at all negotiable, then always country roads by preference. The macadam road is all that is unpleasant—hard, dry, glaring, straight, monotonous; overrun with noisy, dusty,

evil-smelling machines, with their curious and often unpleasant occupants. It is bordered, not with trees, as a road should be, but with telephone poles; a fine coating of lime dust lies like a death pallor on what hardy vegetation struggles to live along its margin; it is commercial, business-like, uncompromising, and unlovely. But the country road belongs to another world—a world apart—and is traveled by a different people. It, too, has its aim and destination, but it is deliberate in its course; it neither cuts through the hills nor fills the valleys, but accommodates itself to the windings of streams and to the steepness of slopes. It is soft underfoot, shaded by trees; it finds and follows the mountain brooks; rabbits play upon it, grouse dust themselves in it, birds sing about it, and berries hang from its banks black and sweet. The people who live in the country travel upon it; it is instinct with the life of a hundred years.

If the day be clear, seek the hilltops; if not, the wooded valleys. The pedestrian learns the by-paths, too, and the short cuts across lots. He can find the arbutus in its season, the blackberries and the mushrooms in theirs. Here is a suggestive page from Thoreau's Journal (August 27, 1854):

"Would it not be well to describe some of those rough all-day walks across lots?—as that of the 15th, picking our way over quaking meadows and swamps and occasionally slipping into the muddy batter midleg deep; jumping or fording ditches and brooks; forcing our way through dense blueberry swamps, where there is water beneath and bushes above; then brushing through extensive birch forests all covered with green lice, which cover our clothes and face; then, relieved, under larger wood, more open beneath, steering for

some more conspicuous trunk; now along a rocky hillside where the sweet-fern grows for a mile, then over a recent cutting, finding our uncertain footing on the cracking tops and trimmings of trees left by the choppers; now taking a step or two of smooth walking across a highway; now through a dense pine wood, descending into a rank, dry swamp, where the cinnamon fern rises above your head, with isles of poison-dogwood; now up a scraggy hill covered with scrub oak, stooping and winding one's way for half a mile, tearing one's clothes in many places and putting out one's eyes, and find[ing] at last that it has no bare brow, but another slope of the same character; now through a corn-field diagonally with the rows; now coming upon the hidden melon-patch; seeing the back side of familiar hills and not knowing them,—the nearest house to home, which you do not know, seeming further off than the farthest which you do know;—in the spring defiled with froth on various bushes, etc., etc., etc.; now reaching on higher land some open pigeon-place, a breathing-place for us."

Another page, too, is worth quoting (July 12, 1852):

"Now for another fluvial walk. There is always a current of air above the water, blowing up or down the course of the river, so that this is the coolest highway. Divesting yourself of all clothing but your shirt and hat, which are to protect your exposed parts from the sun, you are prepared for the fluvial excursion. You choose what depths you like, tucking your toga higher or lower, as you take the deep middle of the road or the shallow sidewalks. Here is a road where no dust was ever known, no intolerable drouth. Now your feet expand on a smooth sandy bottom, now contract timidly on pebbles, now slump in genial fatty mud—greasy, saponaceous—amid the pads. You scare out whole

schools of small breams and perch, and sometimes a pickerel, which have taken shelter from the sun under the pads. This river is so clear compared with the South Branch, or main stream, that all their secrets are betrayed to you. Or you meet with and interrupt a turtle taking a more leisurely walk up the stream. Ever and anon you cross some furrow in the sand, made by a muskrat, leading off to right or left to their galleries in the bank, and you thrust your foot into the entrance, which is just below the surface of the water and is strewn with grass and rushes, of which they make their nests. In shallow water near the shore, your feet at once detect the presence of springs in the bank emptying in, by the sudden coldness of the water, and there, if you are thirsty, you dig a little well in the sand with your hands, and when you return, after it has settled and clarified itself, get a draught of pure cold water there. . .

"I wonder if any Roman emperor ever indulged in such luxury as this,—of walking up and down a river in torrid weather with only a hat to shade the head. What were the baths of Caracalla to this?"

It might seem that all the joys of walking are rural; but it is not so; the city dweller knows as well as his country cousin how to make his surroundings serve his need. Doctor Finley, veteran pedestrian though he be, delighting to walk to the ends of the earth, has no word of disdain for the streets of the city of his home. The following passage is taken from a paper of his which appeared in the *Outlook* and from which quotation has already been made:

"My traveling afoot, for many years, has been chiefly in busy city streets or in the country roads into which they run—not far from the day's work

or from the thoroughfares of the world's concerns.

"Of such journeys on foot which I recall with greatest pleasure are some that I have made in the encircling of cities. More than once I have walked around Manhattan Island (an afternoon's or a day's adventure within the reach of thousands), keeping as close as possible to the water's edge all the way round. One not only passes through physical conditions illustrating the various stages of municipal development from the wild forest at one end of the island to the most thickly populated spots of the earth at the other, but one also passes through diverse cities and civilizations. Another journey of this sort was one that I made around Paris, taking the line of the old fortifications, which are still maintained, with a zone following the fortifications most of the way just outside, inhabited only by squatters, some of whose houses were on wheels ready for 'mobilization' at an hour's notice. (It was near the end of that circumvallating journey, about sunset, on the last day of an old year, that I saw my first airplane rising like a great golden bird in the aviation field, and a few minutes later my first elongated dirigible—precursors of the air armies.) . . .

"About every city lies an environing charm, even if it have no trees, as, for example, Cheyenne, Wyoming, where, stopping for a few hours not long ago, I spent most of the time walking out to the encircling mesas that give view of both mountains and city. I have never found a city without its walkers' rewards. New York has its Palisade paths, its Westchester hills and hollows, its 'south shore' and 'north shore,' and its Staten Island (which I have often thought of as Atlantis, for once on a holiday I took Plato with me to spend an afternoon on its littoral, away from the noise of the city, and on my way home found that my Plato had stayed behind, and he

never reappeared, though I searched car and boat). Chicago has its miles of lake shore walks; Albany its Helderbergs; and San Francisco, its Golden Gate Road. And I recall with a pleasure which the war cannot take away a number of suburban European walks. One was across the Campagna from Frascati to Rome, when I saw an Easter week sun go down behind the Eternal City. Another was out to Fiesole from Florence and back again; another, out and up from where the Saone joins the Rhone at Lyons; another, from Montesquieu's château to Bordeaux; another, from Edinburgh out to Arthur's Seat and beyond; another from Lausanne to Geneva, past Paderewski's villa, along the glistening lake with its background of Alps; and still another, from Eton (where I spent the night in a cubicle looking out on Windsor Castle) to London, starting at dawn. One cannot know the intimate charm of the urban penumbra who makes only shuttle journeys by motor or street cars."

Nature of Country

When it comes to the matter of choosing the region for a walking tour, all sorts of considerations enter in. This has been indicated already; your naturalist will fix upon some happy hunting ground where flowers or birds are abundant, or fossil trilobites or dinosaurs are to be discovered; the fisherman will seek out the mountain brooks; the antiquarian, some remote rural region, perhaps, or scene of battle; the genealogist will visit the graves of his ancestors. But, leaving for the moment such special and individual considerations out of account, what should influence the average pedestrian in his choice of locality?

The choice of locality with relation to season has already been considered, page 43 above.

The choice will not fall upon a flat, undiversified region, particularly if the season be hot and the roads much traveled and dusty. Emerson, in a passage extolling the pedestrian advantages of his native Massachusetts, observes:

"For walking, you must have a broken country. In Illinois, everybody rides. There is no good walk in that state. The reason is, a square yard of it is as good as a hundred miles. You can distinguish from the cows a horse feeding, at the distance of five miles, with the naked eye. Hence, you have the monotony of Holland, and when you step out of the door can see all that you will have seen when you come home."

Having said so much, Emerson adds, in order to put the Illinoian in good humor again:

"We may well enumerate what compensating advantages we have over that country, for 'tis a commonplace, which I have frequently heard spoken in Illinois, that it was a manifest leading of the Divine Providence that the New England states should have been first settled, before the Western country was known, or they would never have been settled at all."

In Oklahoma, they say, one can look farther and see less than anywhere else in the world.

The pedestrian seeks wide horizons, but he seeks more than that. The only classical walk which the writer now recalls, taken in a level region, was Thoreau's tour along the beaches of Cape Cod; but there was the sea—itself an unending delight and stimulus to imagination—and the sand dunes, with all the beauties of mountain form in miniature.

There are, of course, the great recreation grounds of the world: the Swiss Alps, the Tyrol, and in our own country the Glacier National Park, the Yellowstone, and the Yosemite. Such

a place is the pedestrian's paradise. But such a place is, for most of us, far away; ordinarily, the requirement is of something humbler.

Let the choice then be broken country. There is all of New England, the Adirondacks, the Appalachian region, the Ozarks, and the great mountain lands of the West. Some fringe of one or another of these regions is accessible to almost any holiday seeker. In addition to the mountainous areas, there are the drumlins and lakes of our glaciated northern states—New York, Michigan, Wisconsin; and, excepting only the prairies, there is diversity of rolling hills and winding streams everywhere.

The Goal and the Road

It is well to have an objective in a walk, a focus of interest, a climax of effort: a historical objective—the grave of Washington, perhaps, or the battlefield of Israel Putnam; or a natural objective—the summit of Mt. Marcy, or Lake Tahoe, or the Mammoth Cave.

Do not, however, set out from the point of chief interest; let there be a gradual approach; if possible, let the hardest work come near the end; let the highest mountain be the last.

Search out objects of interest within five hundred miles of home, choose one of them as the goal—be it mountain, trout stream, or Indian mound—and let the way lead to it.

On long tours, seek variety—variety of woods, rivers, mountains. Do not, by choice, go and return over the same road, nor even through the same region. Better walk one way and go by train the other.

In crossing mountain ranges, ascend the grad-

ual slope and descend the steep. (On precipices, however, there is less danger in climbing up than down.)

Walk from south to north, by preference; it is always best to have the sun at one's back.

Avoid macadam roads—except when country roads are muddy, or on a night walk. By night smooth footing is especially advantageous. Macadam is wearing to both body and mind—and sole leather; immediately after rain it is tolerable. Avoid highways, seek byways. Leave even the byways at times, and travel across country.

Maps

On map making, see page 111.

A map is useful, and, on an extended tour, almost necessary. Topographic maps, showing towns and roads also, of a large part of the United States are published by the United States Geological Survey. Better maps could not be desired. Different regions are mapped to different scale, but, for the greater part, each map or "quadrangle" covers an area measuring 15′ in extent each way; the scale is 1:62,500, or about a mile to an inch. Each quadrangle measures approximately 12¾ x 17½ inches and displays an area of 210-225 square miles, the area varying with the latitude. To traverse one quadrangle from south to north means, if the country be hilly and the roads winding, to walk twenty miles or more.

On these maps water is printed in blue, contour lines in brown, and cultural features—roads, towns, county lines—in black. A contour line is a line which follows the surface at a fixed altitude; one who follows a contour line will go

neither uphill nor down, but on the level. The contour interval, that is, the difference in elevation between adjacent contour lines, is stated at the bottom of each quadrangle. It is not uniform for all the areas mapped, and is greater in mountains and less in level regions. Every fourth or fifth contour line is made heavier than the others.

A little experience will teach one to read a contour map at a glance; the shape of the hills is indicated, and their steepness. In addition, these maps bear in figures (and in feet) actual elevations above sea level.

Besides the quadrangles on the unit of area mentioned, the Survey publishes maps to larger scale, of regions of exceptional importance: Boston and vicinity, for instance; Washington and vicinity; the Gettysburg battlefield; the Niagara gorge; Glacier National Park; industrial regions such as Franklin Furnace, N. J., and vicinity.

Application may be made to The Director, United States Geological Survey, Washington, D. C., for an index map of any particular region in which one is interested; the index map is marked off into quadrangles, and each quadrangle bears its distinctive name. Information regarding larger maps is also given. So that, on consulting the index map, one may order by name the particular quadrangles or larger maps he may desire. The price of the quadrangles is ten cents each, or six cents each for fifty or more. The larger maps units are of varying price.

For remoter regions, not yet mapped by Government, ruder maps may ordinarily be had.

Such foreign regions as the Alps are, of course, perfectly mapped. The maps in Baedeker's guide-

books are good, and better still may be had, if one desires.

It is a good plan to have the maps of one's home region mounted on linen and shellaced.

Map case. Maps of small size and constantly in use may be put in form for carrying by cutting them into sections and mounting them on linen, with spaces for folding left between the edges of adjacent sections. A map so mounted may be folded and carried in an oiled silk envelope. Leather is not a satisfactory material for such a case, for, when carried in one's clothing, it becomes wet through with perspiration.

For a walk on which one has occasion to use a number of maps, it is preferable to provide oneself with a cylindrical case of sheet tin, in which the rolled maps may be contained. A suitable case for the Geological Survey quadrangles measures eighteen inches in length and two in diameter. A close-fitting lid slips over the open end, and there are runners soldered to one side, through which a supporting strap may pass. A small hole in the bottom facilitates the putting on and removal of the lid. Any tinsmith can make such a case in a short time. It should be painted outside. It may be suspended by a strap from the shoulders, and so be easily accessible, or it may, if preferred, be secured to or carried within the knapsack.

Walking by Compass

Where roads are many and villages frequent, one may easily find his way, map in hand. But in the wilderness the map must be supplemented by the compass. The beginner should go gradually about this matter of traveling by compass;

he should gain experience in small undertakings. For one acquainted with the art, there is in its practice an alluring element of novelty and adventure. Most of all, one needs to teach himself to rely on his compass *implicitly*.

A few suggestions about walking by compass may be useful. *First*, study the map, and note the objective points; *second*, on setting out, have always a definite point in mind and know its exact bearing; refer to the compass repeatedly, directing one's course to a tree, rock shoulder, or other landmark, and on reaching it, appeal to the compass again, to define a new mark; *third*, in making detours, around bogs or cliffs, use the wits, and make proper compensation; *finally*, and as has once been said, but cannot be too often said, trust the compass.

From a mountain top, if the destination can be seen, one may study the contour of the land between and, engraving it surely in mind, direct his course accordingly. But ability to do this is gained only through long experience. For a novice to attempt it were foolhardy, and might lead to serious consequences.

In making mental note of landmarks, one should, so far as possible, get *two aligned points* on the course ahead, for by keeping the alignment deviation may be corrected.

On a clear day, having laid one's course, one may follow it by the guidance of one's shadow. But here again, some experience is needed, before trusting one's ability too far.

One's watch may serve as a rude compass, remembering that at sunrise (approximately in the east and approximately at six o'clock) *the watch being set to sun time*, if the watch be so placed that the hour hand points to the sun, the north

and south line will lie across the dial, from the three o'clock index number to nine. And at any succeeding time of the day, if the hour hand be pointed to the sun, south will lie midway between the point where the hour hand lies and the index number twelve. Manifestly, this improvised compass can be exactly right only at equinox, and only when the watch is set to meridian time.

WALKING CLUBS IN AMERICA

UPHILL

Does the road wind uphill all the way?
Yes, to the very end.

Will the day's journey take the whole long day?
From morn to night, my friend.

But is there for the night a resting-place?
A roof for when the slow, dark hours begin.

May not the darkness hide it from my face?
You cannot miss that inn.

Shall I meet other wayfarers at night?
Those who have gone before.

Then must I knock, or call when just in sight?
They will not keep you waiting at that door.

Shall I find comfort, travel-sore and weak?
Of labor you shall find the sum.

Will there be beds for me and all who seek?
Yea, beds for all who come.

Christina G. Rossetti.

IV

WALKING CLUBS IN AMERICA

The walking clubs of Europe have had a long and useful history. The favored regions, particularly the Alps, the Bavarian highlands, and the Black Forest, have, time out of mind, been the holiday land for all the European peoples. Walking there is in vogue as nowhere else in the world, unless it be among the English lakes. Before the war it was interesting to an American visitor in the Tyrol to observe how many people spent their holidays afoot—and how many sorts of people: men, women, old, young. Sometimes one met whole families walking together. It was not a surprising thing to encounter a fresh-cheeked schoolgirl on the peak of the Wildspitze; and pedestrian bridal tours seemed to be, in some strata of society at least, quite the thing. But the impressive fact was that there were hundreds of people—men, women, and children—tramping the mountains together, and finding the inseparable desiderata, health and happiness.

This enthusiasm for walking has expressed itself in walking clubs; they are part of the "Movement": The Alpine Club, *Le Club Alpin Français, Il Club Alpino Italiano, Die Deutsche und Oesterreiche Alpenverein, Der Schweize Alpenclub,* etc. These clubs lay trails and blaze them, through chasms, across passes, and to summits. (It is the pedestrian alone to whom the mountains reveal their extremest beauties.) The clubs maintain, at comfortable intervals, mountain huts, where one may find simple food and a clean bed; and they prepare and publish maps and guidebooks.

We are followers of the Europeans, and we have this advantage of followers, that we may see and profit by all that they have done.

Already there are many walking clubs in America; their memberships are greatest, as might be expected, in New England and on the Pacific Coast. Some of these organizations are concerned chiefly with feats of mountaineering; others with the needs of the greater number of ordinary people. It is of the clubs of this latter class that some account will here be given. But at the outset a word of apology is needed. The data from which this chapter is prepared are in the necessity of the case casually collected; it cannot be otherwise than that they are fragmentary; and the result must be faulty and ill proportioned. The chapter is offered as a provisional one. Organizations not mentioned, but which might have had place with those which are, are requested to furnish data respecting themselves; all interested are invited to note mistakes and give advice of corrections, to the end that a more useful and more nearly satisfactory chapter may ultimately appear. Communications may be addressed to the League of Walkers, 347 Madison Avenue, New York.

The Appalachian Mountain Club

One of the oldest and the most distinguished of the walking clubs of America, is the Appalachian Mountain Club, of Boston, with its two outlying "chapters," in New York, and in Worcester, Mass. Following is the official statement of the Club's objects and activities.

"The Appalachian Mountain Club was organized in Boston in January, 1876, to 'explore the

mountains of New England and the adjacent regions, both for scientific and artistic purposes.' Its activities are directed not only toward the preservation of the natural beauty of our mountain resorts,—and in particular their forests,—but also toward making them still more accessible and enjoyable through the building of paths and camps, the publishing of maps and guidebooks, the collecting of scientific data, and the conducting of numerous field excursions.

"In the fulfilment of its main purpose it has built and maintained over two hundred miles of trails, three stone huts and nine open log shelters, all in the White Mountains, and a clubhouse on Three Mile Island in Lake Winnepesaukee. It has also acquired sixteen reservations, held purely in trust for the benefit of the public, in New Hampshire, Maine, and Massachusetts. It annually conducts four long excursions: one in February for snowshoeing, one in July, one in August, for those who prefer camp life, and one in early autumn, besides the same number of shorter trips in February, May, early September, and at Christmas. These are mainly in New England and New York. In addition there are Saturday afternoon walks to various points of interest in the country around Boston and New York City, the latter under the New York Chapter. Occasionally there are special walks for those interested in natural history. Those wishing to go farther afield can obtain privileges in connection with the annual outings of the western mountaineering clubs.

"From October to May monthly meetings are held in Boston and to these members may invite friends. In connection with these meetings illustrated lectures are given upon mountain regions and other outdoor subjects of interest.

"Clubrooms are maintained in the Tremont Building [in Boston], where committee meetings

and small informal gatherings are held, and where the fine library, many maps, and a large collection of photographs are kept. . .

"Members are kept informed of the activities of the Club by a monthly Bulletin, and at least once a year an illustrated magazine, entitled *Appalachia,* is published. . . In addition the Club has published a 'Guide to Paths in the White Mountains and Adjacent Regions' ($2.00), a 'Bibliography of the White Mountains' ($1.00), 'Walks and Rides about Boston' ($1.25), a booklet 'Equipment for Climbing and Camping' (10 cents), and a 'Snowshoe Manual' (10 cents).

"In January, 1919, there were about 2300 members (the New York Chapter numbers 145). Membership in the Club costs eight dollars for the first year and four dollars a year thereafter. No climbing qualification is necessary, but candidates must be nominated by two club members, to whom they are personally known, and approved by the Committee on Membership. Application blanks and further information may be had by addressing the Corresponding Secretary, 1050 Tremont Building, Boston."

The Green Mountain Club

The Green Mountain Club, of Vermont, was organized March 11, 1910, with the object of making the remotest and wildest regions of the Green Mountains accessible to pedestrians. As rapidly as its income permits, it is building the Long Trail, which when completed will be a "skyline" trail for walkers, following the mountain ridges and ascending the peaks, throughout a course of about 250 miles, from the Canadian line to Massachusetts.

Two portions of the trail have already been built and are in use: one, a stretch of thirty miles,

extending north and south near Rutland; the other, a continuous section of sixty-seven miles, extending from Middlebury Gap, fourteen miles east of Middlebury, northward, to Smugglers' Notch, on the east side of Mount Mansfield. It requires eight days to cover this section of the Trail. There is a cabin of the Club, or a clubhouse, farmhouse, or hotel available at the end of each day's hike. It is better to carry food and blankets, though blankets may be hired and food sent in under arrangements made in advance. There is good prospect that by the end of the summer (of 1919) new trails will be built, connecting the two portions mentioned, and extending the northern stretch some miles further, to Johnson. The Club will then have built and brought under its care 130 miles of continuous trail.

Some account of walking the Long Trail may be found in "Vacation Tramps in New England Highlands," by Allen Chamberlain.

The dues of the Club are $1.00 a year; the membership exceeds 600. There are several sections or branches, each of which has charge of the construction and maintenance of a section of the Long Trail.

The Burlington Section in the course of the year holds a number of outings in the vicinity of Burlington, and conducts two or three trips into the mountains. On Washington's Birthday, each year it makes a trip, either to Mount Mansfield or to the Couching Lion.

The New York Section, organized in 1916, has 212 members. It conducts many half-day, full-day, and week-end outings in the vicinity of New York City, and an occasional excursion to the Green Mountains. During the year 1918-1919, in

addition to the activities indicated, it gave three social reunions with camp fire suppers, four illustrated lectures, conducted a pilgrimage to the home of John Burroughs, and held a membership dinner at a New York hotel.

For information regarding the Long Trail, advice about shelters, for maps, and for suggestions regarding particular hikes, write to the Corresponding Secretary, 6 Masonic Temple, Burlington, Vt.

The American Alpine Club

The American Alpine Club requires the highest qualifications for membership of any walking club. Its one hundred members come from all parts of the country. An annual dinner is given in Boston, New York, or Philadelphia. The address of the secretary is 2029 Q St., Washington, D. C.

Walking Clubs of New York

Mr. Albert Handy is the historian of the walking clubs of New York, and his account of them is, with his generous permission, here given. It appeared first in the New York *Evening Post Saturday Magazine*, for May 6, 1916, and has been revised for the purposes of this handbook.

"The first walking club in America of which any record is found was the little Alpine Club organized by some of the professors at Williamstown, Mass., which came into being about 1863 and went out of being a few years later. But before its demise Mr. and Mrs. Henry E. Buermeyer and William B. (better known as 'Father Bill') Curtiss had formed the habit of exploring the wilds of Staten Island or the highlands of the

Hudson—there were no developments then, and it was a wilderness—on Sundays. 'Father Bill' Curtis was the premier athlete of America and the founder of the New York Athletic Club. Mrs. Buermeyer was one of the first women to ride a bicycle in this country, and Mr. Buermeyer was a noted swimmer.

"This little group constituted the beginnings of the Fresh Air Club, which is today the oldest walking club in New York, and which can alone contest the claim of the Appalachian Mountain Club to the premiership of the United States. Shortly after its foundation the winged-foot organization sent a score of its members on these walks and Mrs. Buermeyer dropped out. Later some members of the old American Athletic Club, in conjunction with others from the Manhattan Athletic Club, developed a walking cult, and for a time pedestrianism seemed destined to become a popular pastime. In this group was E. Berry Wall, whose name is associated with dancing rather than athletics in the minds of the majority of New Yorkers.

"Then interest diminished gradually until each organization furnished but a negligible number of walkers. Followed something in the nature of a renaissance, the two groups consolidated, and the present Fresh Air Club came into being.

"In the early eighties interest in athletics increased, there were organized baseball clubs, tennis clubs, cricket clubs, but for a long period the Fresh Air Club was the only organization devoted to walking, with the exception of the Westchester Walking Club, otherwise known as the Westchester Hare and Hounds (whose members were recruited from the then prosperous but long since defunct Harlem Athletic Club), which rose, flourished, and decayed, leaving its spirit and traditions to be carried by the Fresh Air Club, which in February, 1890, was incorporated.

"What the Appalachian Mountain Club did for New Hampshire the Fresh Air Club did for the country within a fifty-mile radius of New York; there is not a section of northern New Jersey, or of Rockland, Westchester, or Orange County, which has not been explored by some of its members. On Friday of each week during the tramping season 'Father Bill,' who was official pathfinder, would go over the route of the walk projected for the following Sunday, when necessary blazing a trail, so that the party might proceed without any delay or casting about for the right road, until finally the paths up Storm King, Bear Mountain—there wasn't any Interstate Park then—Anthony's Nose, and the highlands of the Hudson became as familiar to him as the path to his own door. . . .

"Today the Club has about seventy-five members, of whom some forty are active. Its walking season extends from October to December and from March to June, and walks are scheduled for all Sundays and holidays, to a few of which women friends of members are invited. During the winter months skating excursions, when weather conditions are favorable, are substituted for walking. The Fresh Air Club does not seek an increase in membership; in fact, a member remarked to the writer that it did not desire publicity or even a considerable amount of inquiry from would-be candidates for membership. Its bulletin states:

" 'That its constitution, by-laws, and rules have not been, and will not be, published; that it accepts no members who are not good cross-country walkers, and that membership can be obtained only after personal acquaintance and such participation in the excursions of the Club as is needed to prove the candidate's fitness and ability. . . . Participation by non-members in the excursions of the Club is by invitation only.'

"As a veracious chronicler it becomes incumbent upon me to here set down that during its long existence of nearly half a century it has exercised practically no influence and has never attained a place in the sun as a constructive factor in the encouragement of general walking, although its object, according to its certificate of incorporation, is the 'encouragement and promotion of outdoor sport for health and pleasure.'

"The year 1911 was momentous in the history of walking. Outdoor life was enjoying a popular boom; for this condition the motor car and the country club were in large measure responsible. The open-air enthusiast found a ready hearing, his preachments falling upon fertile ground. In this year a little group of about ten walkers organized the Walkers' Club of America, and almost simultaneously Charles G. Bullard, of the Appalachian Mountain Club, established a New York branch of that organization, the membership being drawn principally from the members of the Boston Club residing in or near this city. Prominent among the organizers of the Walkers' Club was James H. Hocking, one of the most enthusiastic pedestrians in this country, and one who believes that walking will cure most of the ills to which mind and body are heir. This organization was opposed to hiding its light under a bushel; its conception of its functions was thoroughly democratic; its primary purpose was to induce the largest number of people possible to use their legs in the way that God intended that they should.

"Now, while walking could scarcely be said to be attaining widespread popularity, there was in the ensuing year or two a steady growth in interest. A walking organization was formed by some of the members of the Crescent Athletic Club in conjunction with the Union League Club, also of the 'city of homes and churches,' and a

programme of Sunday walks was prepared. But it was in 1913 that the actual recrudescence in walking occurred, when the *Evening Post* and the *Times* gave considerable space to articles on walking. In the late winter of that year, too, there began to appear inconspicuous paragraphs on the sporting pages of the Monday morning papers to the effect that on the previous day members of the Walkers' Club had hiked from City Hall to Coney Island, or perhaps from St. George to New Dorp or from Columbus Circle to Hastings.

"The schedule time of the Coney Island walk, for the novice squad, to be completed before noon, was about two hours and a half. And the average New Yorker, who regards a long sleep and a good breakfast on Sunday mornings as his inalienable rights, gazed gloomily at these items, and then turned to an account of a murder or a break in the stockmarket, anything in fact radiating a more cheerful influence. Even the enthusiastic golfer sighed to himself as he thanked God that he was not as some other man.

"It was in 1913, too, that the Ladies' Walking Club, affiliated with the Walkers' Club of America, was organized, but it has never had many members or attained any marked degree of popularity. Prior, however, to its formation, the Alumnæ Committee on Athletics of Barnard College prepared a programme of intercollegiate outings for Saturdays, Sundays, and holidays, which included several pleasant hikes; and these attracted a much greater number of participants than did the events of the Ladies' Walking Club.

"Under the impetus derived from the Walkers' Club several of the evening high schools formed pedestrian organizations which turned out with the parent body. One of the morning newspapers offered century medals, which seems to have materially stimulated interest, and by the beginning

of 1915 there were six or eight schools that sent out their squads of hikers every Sunday.

"It was early in 1915 that the Walkers' Club, with a membership of over two hundred, was incorporated. Shortly thereafter a schism arose in its ranks, which resulted in the birth of the American Walkers' Association. At a meeting of the Walkers' Club, held in June, seven members withdrew. Within a week twelve men had formed the Walkers' Association, which was almost immediately incorporated. Of the split it may be said that it was deplorable, and beyond that its history must occupy a blank page in the annals of American walking.

"The Walkers' Association immediately began an aggressive campaign to secure members. It adopted a small emblem which the majority of the one hundred and twenty men on its rolls wear. It also adopted the walking associations of most of the evening high schools, as well as all promising material which it could discover. Finally it organized a women's branch with a schedule of walks of its own. It points with pride to a membership of over 135, a record of 17,856 miles covered by members on its hikes, so that if a message had been relayed it might have crossed the continent five times; to one hike on which 107 men turned out, and to another—not the same hike—when fifty miles was covered in a day.

"The walks of the Walkers' Club and the Walkers' Association invariably start from New York, and up to the present time have invariably been along the high roads which the pedestrian must share, in unequal distribution, with the motorcar and other vehicles. A speed of four to six miles an hour is maintained and the walks vary from ten to fifty miles in length. The walkers are divided into squads, graded according to speed and the distance to be covered. The

hikes of the Fresh Air Club, on the other hand, start from some point reached by train, twenty to forty miles from New York, and the trail leads through the woods and over the hills, through streams and bogs and over rocks and fallen trees, with an occasional stretch of road as an incident to the walk.

"Like the Walkers' Club it has a schedule, and where the going is good a speed of four miles or better is maintained. The walks terminate at a railway station which must be reached before train time. The Appalachians, however, saunter, they rarely exceed ten miles on their local tramps, they proceed leisurely cross country, if they see a hill that appeals to them they climb it and enjoy the view, or they linger on the shores of some lake. The Club walks are all held on Saturday afternoons and holidays, Sunday walking being mildly disapproved.

"As a purely constructive factor in the development of pedestrianism in the eastern United States, the Walkers' Club and Walkers' Association probably lead. Other clubs have conceived theories—ideals, perhaps—these organizations have created pedestrians. Their walking season extends from the 21st of June to the 22nd of December, and from the 22nd of December to the 21st of June. Both clubs have trained people to walk. An officer of one of them once remarked to the writer that fifty per cent of the members did not know how to use their legs.

"The Walkers' Club has to its credit an extended list of activities. It fathered the evening high schools' walking movement; it inaugurated a campaign of publicity; it has through Pathfinder Hocking planned walks of from one day to one week for individuals and groups; it has done much to raise pedestrianism from its low estate to an equality with other sports and the end is not yet. 'Hocking,' said a member of a rival organ-

ization, 'has done more for walking than any other man in America, but—' and the rest of the sentence I have transferred to that unpublished page in the annals of walking on which the recording secretary spilled his ink.

"A few years ago the Walkers' Association mapped out a most elaborate program. With the consummation of its plans, however, the war materially interfered. It was intended to create a large number of walking squads. There was to be a squad for the 'tired business man'—that variety of the genus homo of whom we read much and whom we never see; a cross-country squad, which would take tramps similar to the hikes of the Fresh Air Club; an afternoon squad for the man who desired to spend his Sunday mornings in dreams; and any other kind of squad that anyone might desire to suggest.

"It planned the establishment of affiliated clubs in other cities, and ultimately an organization which would in some respects resemble the *Wandervogel,* the great national pedestrian body of Germany. At the present time it has a prosperous branch at Cleveland with a membership in excess of five hundred.

"In the meantime, before a consummation of their more ambitious plans can be hoped for, much less realized, it were well if a federation of all the walking clubs in New York was perfected, with a common headquarters, where maps and data of much value might be made available to all hikers, and where frequent gatherings might be held for the interchange of ideas and experiences. And to the attainment of this object the Walkers' Association may well address itself."

WANDERLUST

"Wanderlust" is the appellative under which Saturday afternoon walks in the vicinity of Philadelphia are organized. They have been con-

ducted for now ten years. Schedules of walks are published quarterly in advance, and the leaflets bear this advertisement:

"These walks are arranged for the general public. There are no fees, dues nor other requirements. Everyone is welcome, on one walk or all. All that is necessary is to be at the starting place at the time appointed. The only cost is that of carfare. The walks are all about five miles, and often include some points of interest, although no special effort is made by the leaders toward that aim. No fast walking is done, as new people come each week, and might not be able to keep up. The whole aim of the walks is to get people out into the open, to learn how even a simple exercise like walking can mean strength and health for those who seek it, and pleasure for all. . . Copies [of this announcement] will be mailed only to those who send a stamped, addressed envelope to any active member of the Committee, or to the Secretary."

The secretary (address 351 East Chelton Avenue, Germantown, Pa.) writes (June 13, 1919):

"The Wanderlust goes on about the same as it has done since 1910, though our numbers have been much smaller during and since the war. So many of our followers were engaged in war work, or working overtime, that we noticed their absence very much. For many years our average was about fifty, but for the past two years it has been around thirty.

"We have two classes of walkers, the regulars, many of whom have been along from the start, and the irregulars, who come from one to a dozen times, and seem to drop away for no reason we can learn. Many people come once and never again, probably disappointed to find the walkers a happy lot, who apparently need little to satisfy them. That conclusion we arrived at after hear-

ing their remarks on many occasions. But the critics were not 'hikers' and did not have the spirit.

"About the permanence of such an undertaking, I can only say that I feel sure we have lasted so long because we avoided any form or attempt at organization, and kept it a free-for-all-come-once-or-always outing party.

"We profited by the mistakes of some other cities, where they organized, with the usual factional rivalry, and breaking-up of the club, and in another case, the growth of an exclusive club, shutting out many who could not afford to continue. So we have fought all attempts (on the part of a few) to organize in any way. Of course that means that someone must head the committee and volunteer to be the secretary or chairman. Being an assistant to the Director of Physical Education, I was asked to take charge of the Wanderlust about eight years ago and am still a willing secretary, and believe that by keeping the hike under the Department we are keeping it from breaking up or changing into a less desirable form. Our aim is to give an opportunity to grown people to get some of the physical training and efficiency that the school children get in our schools, and at the same time to encourage outdoor 'play' for young and old.

"Unfortunately this year our Board felt unable to bear the small expense necessary, so we are charging a small sum for the announcements and so far have been able to be self-supporting. But it is not in keeping with our 'free' policy, and we hope soon to do away with the charges, small as they are."

The Pittsburgh Health Club

This organization, now fifteen years old, conducts weekly walks. The secretary's address is 249 Martsolf Ave., Pittsburgh, Pa.

The Prairie Club

The Prairie Club, of Chicago, was organized in 1908 by a committee of the Playground Association of Chicago as "Saturday Afternoon Walks." It was incorporated in 1911 as "The Prairie Club." The objects of the club are: "The promotion of outdoor recreation in the form of walks and outings, camping, and canoeing; the encouragement of the love of nature and the dissemination of knowledge of the attractions of the country adjacent to the city of Chicago and of the Central West; and the preservation of those regions in which such outdoor recreation may be pursued." There are three kinds of memberships: active, associate, and honorary. The initiation fee for active membership is $2.00, and the annual dues are $2.00. The club maintains a Beach House and Camp, situated in the heart of the Indiana dunes, on the south shore of Lake Michigan, 47 miles from Chicago, the privileges of which are available to active members of the club and their guests. The club also publishes an attractive monthly bulletin. During the year 1918 the club conducted 42 Saturday afternoon walks, 8 all-day walks, 4 week-end outings, and 1 extended outing. Up to March, 1919, the club reported 645 active members.

The Sierra Club

The Sierra Club, of San Francisco, California, is the largest of American pedestrian clubs, with a membership of more than 2,000. It was founded in 1892, and was further distinguished in having as its president, until his death (in 1914), John Muir. Its purposes are defined in these words:

"To explore, enjoy, and render accessible the

mountain regions of the Pacific Coast; to publish authentic information concerning them; to enlist the support and cooperation of the people and the Government in preserving the forests and other natural features of the Sierra Nevada."

The annual dues of the Club are $3 (for the first year, $5). The club headquarters are at 402 Mills Building, San Francisco. A Southern California Section of the Club exists, and advice concerning it may be had of its chairman, address 315 West Third Street, Los Angeles.

The Mountaineers

The following note has been furnished by the secretary of the organization:

"To explore and study the mountains, forests, and water courses of the Northwest; to gather into permanent form the history and traditions of this region; to preserve, by protective legislation or otherwise, the natural beauty of northwestern America; to make expeditions into these regions in fulfilment of the above purposes; to encourage a spirit of good-fellowship among all lovers of outdoor life—these were the avowed purposes for which a group of nature lovers met in Seattle in January, 1907, and organized The Mountaineers. Since then, the membership has expanded to over half a thousand, and knows no geographical bounds. Nearly a hundred men and women contributed themselves in the recent war, while those at home rendered active service in collecting sphagnum moss, making surgical dressings, and otherwise trying to do their part. Branches have been organized, property acquired, permanent funds established, and the Club has now become one of the worthwhile organizations of the Pacific Northwest.

"Summer outings and the snowshoe trip to Mt. Rainier with which the Club welcomes in each

new year are the most striking of its activities. For three weeks each summer a hobnailed, khaki-clad party of from fifty to one hundred men and women enjoy a well planned hike into some mountainous region, and usually climb some famous peak. Mt. Rainier, Mt. Adams, Mt. Olympus, Glacier Peak, Mt. Stewart, Mt. St. Helens, and many others have been climbed once or more. Glacier National Park, as well as our own Monte Cristo region, has also been visited.

"With pack trains, hired packers, and professional cooks along, little of the unpleasant work of camping falls on the members, yet, with each individual's dunnage limited to thirty-five pounds, and with frequent shifting of camps and plenty of snow and rock work, genuine outing experience is afforded. The leadership is wholly by members, and every precaution is taken for the safety of the party.

"The snowshoe trip to Mt. Rainier in midwinter must be taken to be comprehended. Paradise Valley in summer is brilliant with its mountain flowers, but in winter it is enchantingly somber with its deep-laid snow, through which emerge the conical trees with their symmetry of drooping branches peculiar to the snow-laden conifers. Snowshoeing, skiing, tobogganing, and climbing afford ample exercise, while the hotel (usually approached through a snow tunnel) with its comfortable beds and provisions brought up in summer time, relieves the party of the usual hardships of winter trips. In the evenings, before the big fireplaces, vaudeville performances, circuses, and other entertainments rival similar affairs held in the evenings of the summer outings.

"Winter and summer trips are taken to Snoqualmie Lodge, a large log structure built by the Club near the backbone of the Cascade Range, but easily accessible both to railroad and highway, as well as to rugged mountains like Chair Peak and Silver Tip.

"A wholly different region may be enjoyed at the Club's Rhododendron Park, a large area across Puget Sound, brilliant each May with a profusion of the white and pink of the state flower. The Club is planning the construction of a cabin in the mountains near Everett, and also one near Tacoma.

"Lecturers are procured for monthly meetings, a collection of slides maintained of the mountains visited by the Club, botany and other sciences pursued, and the results of each year's activities summarized in an annual publication. A bulletin is also published forecasting each month's activities.

"Beneficial as the foregoing may be, the greatest service to the greatest number is afforded by what are prosaically known as 'local walks.' On each of two or three Sundays of the month a committee in charge has carefully planned a hike of from eight to twenty miles by road, trail, or beach. As many as two hundred persons have sometimes gone on one of these trips. Stenographers, teachers, clerks, professors, nurses, lawyers, doctors, men and women, are taken from the cramped atmosphere of offices, schoolrooms, and hospitals out into the freedom of the wild, to breathe the fresh sea air, and to acquire that physical health and hearty mien which are such stimulants to the growth of character."

The secretary's address is 402 Burke Building, Seattle, Washington.

Other western mountaineering clubs are the Mazamas, of Oregon, headquarters, Suite 213-214 Northwestern Bank Building, Portland; and the Colorado Mountain Club.

Associated Mountaineering Clubs of North America

The Associated Mountaineering Clubs of North

America, an organization effected in 1916, characterizes itself as a *Bureau.* It has brought into association thirty-one clubs and societies, having an aggregate membership of 62,000. A list of these follows:

American Alpine Club, Philadelphia and New York.
American Forestry Association, Washington.
American Game Protective Association, New York.
American Museum of Natural History, New York.
Adirondack Camp and Trail Club, Lake Placid Club, N. Y.
Appalachian Mountain Club, Boston and New York.
Boone and Crockett Club, New York.
British Columbia Mountaineering Club, Vancouver.
Colorado Mountain Club, Denver.
Dominion Parks Branch, Department of the Interior, Ottawa.
Field and Forest Club, Boston.
Forest Service, U. S. Dept. Agriculture, Washington.
Fresh Air Club, New York.
Geographic Society of Chicago.
Geographical Society of Philadelphia.
Green Mountain Club, Rutland, Vermont.
Hawaiian Trail and Mountain Club, Honolulu.
Klahhane Club, Port Angeles, Washington.
Mazamas, Portland, Oregon.
Mountaineers, Seattle and Tacoma.
National Association of Audubon Societies, New York.
National Parks Association, Washington.
National Park Service, U. S. Dept. Interior, Washington, D. C.
New York Zoological Society, New York.
Prairie Club, Chicago.

Rocky Mountain Climbers Club, Boulder, Colorado.

Sagebrush and Pine Club, Yakima, Washington.

Sierra Club, San Francisco and Los Angeles.

Tramp and Trail Club, New York.

Travel Club of America, New York.

Wild Flower Preservation Society of America, New York.

The Bulletin of the Bureau, published in May, 1919, states:

"Associated by common aims these clubs and societies are standing for the protection and development of scenic regions, and for the preservation of tree, flower, bird, and animal life. We encourage the creation, development, and protection of National Parks, Monuments, and Forest Reserves, and our members are being educated by literature and lectures to a deeper appreciation of our natural wonders and resources.

"During the past year the Bureau has continued to send to its members many books on mountaineering and outdoor subjects. The collection of mountain literature and photographs in the New York Public Library, 476 Fifth Avenue, has been increased. The Library has published a selected Bibliography of Mountaineering Literature, which was compiled by the librarian of the American Alpine Club, and expects to issue a similar list of the literature of Wild-life Protection. . . . The secretary has written and has published a series of articles on little-known scenic regions of North America, and he is lecturing before leading clubs and societies on The National Wonders of the United States and Canada. . . .

"Lantern slides may be borrowed by members of the Association on application."

Note is made in the Bulletin of the International Congress of Alpinists, which is to be held

at Monaco, May 10 to 16, 1920. Relationships with the several organizations which have to do with the care of and development of the national parks are explained. A directory of the constituent organizations is given.

The secretary is Mr. LeRoy Jeffers, 476 Fifth Avenue, New York City.

ORGANIZATION AND CONDUCT OF WALKING CLUBS

OVERFLOW

Hush!
With sudden gush
As from a fountain, sings in yonder bush
The Hermit Thrush.

Hark!
Did ever Lark
With swifter scintillations fling the spark
That fires the dark?

Again,
Like April rain
Of mist and sunshine mingled, moves the strain
O'er hill and plain.

Strong
As love, O Song,
In flame or torrent sweep through Life along,
O'er grief and wrong.

John Banister Tabb.

V

ORGANIZATION AND CONDUCT OF WALKING CLUBS

Those who live reasonably near the home or field of existing clubs are urged to relate themselves to them. Don't organize hastily. Be sure, first, of two things: that a fair-sized continuing membership is to be expected, to be advantaged by a club; and, second, that, in the multiplicity of already existing societies, there is place for another. Remember that the persons who will be interested and whose interest and support are desired, will in large part be persons already giving much time to altruistic activity. Think this matter through, taking advice of persons of experience and judgment. It may be better, in a given case, to widen the activities of some existing organization—canoe club, perhaps, or Audubon Society—than to form a new one. Pedestrianism may well have place in the program of school, Y. M. C. A., or Boy Scout Troop. But of this something will be said in the sequel. In a city, however, a walking club may well stand on its own feet; and, in such a favored region as the Green Mountains, for example, to organize a walking club comes near to being a public duty.

The Activities of a Walking Club

Before opening a discussion of the formalities of organization, it will be well to consider what the normal activities of a walking club are; for to the end in view the machinery of organization, simple or complex, should be adapted. The activ-

ities of a club may be regarded as of two sorts, and, in lieu of better terms, may be designated as primary and secondary. Primary activities concern the actual business of walking: development of the pedestrian resources of some particular region, trail making, map making, publishing of data, maintaining a bureau, conducting hikes, affording instruction, and contributing seriously to the growing literature of pedestrianism. Secondary activities consist in conducting dinners and other social entertainment, in providing illustrated lectures on travel, popular science, and kindred subjects. There is need of care, to keep such activities in their proper secondary place. The primary activities require further consideration.

Development of the Pedestrian Resources of Some Particular Region

This should be an aim of every walking club. The region to be developed will in many—in most cases, indeed—be the region about home. Clubs in large cities, however, and clubs situated in regions not suitable for walking, may well turn attention, wholly or in part, to regions far from home. The mountainous parts of a continent are the natural recreation grounds for the whole people, and those who live far away may still have their proper share in making these parts more readily available. In the Alps, the pedestrian is pleased to find the lodges where he stops at night called by the names of distant cities, whose citizens maintain them—*Breslauerhütte,* for example, or *Dusseldorferhütte.* In this country, too, the Green Mountain Club (see page 84) has its New York Section; and to the New York Section it has allotted a certain portion of the Long Trail (a length of fifty miles). The New

York club, accordingly, while not neglectful of pedestrianism at home, opens, develops, and maintains its part of the route in Vermont, and conducts annually a hike in that region.

The development of a region involves observation and putting into communicable form the results of observation, and it may and ordinarily does involve further a greater or less amount of physical preparation. First of all, the region must be traversed, and that again and again, under varying conditions of season and climate, and thus thoroughly known. Maps, if available, must be carefully studied, and particular attention must be given to distances, steepness of roads, and to the nature of the footing—whether the way be rough or smooth, hard or soft, wet or dry. Note should be made of obstructions, such as briars, fallen trees, and unbridged streams. The possibility of using railways and trolley lines to widen the available area should not be forgotten. Hotels should be noted, and restaurants, and farmhouses, where rest and refreshment may be had; and, in the wilderness, camp sites should be selected.

Observation should next be directed to such natural resources as may engage the attention and interest of the pedestrian: scenery, of course, hilltops, waterfalls, and such matters; then to plant and animal life, and that with the interests of sportsmen and lovers of natural science particularly in mind. Attention should be given to geology and to mineral deposits. Then the history of the region should be studied, its traditions learned, and its monuments considered—distinctive and characteristic matters touching the life of the people, industries, factories, public works, and buildings.

All of these matters should be taken into account, with a view to making the results of observation and study generally available.

Trail Making

"Of trail making there are three stages. There is dreaming the trail, there is prospecting the trail, there is making the trail. Of the first one can say nothing—dreams are fragile, intangible. Prospecting the trail—there lies perhaps the greatest of the joys of trail work. It has a suggestion of the thrill of exploration. No one of us but loves still to play explorer. And here there is just a bit of the real thing to keep the play going. Picking the trail route over forested ridges calls for every bit of the skill gained in our years of tramping. There is never time to go it slow, to explore every possibility. Usually there is one hasty day to lay out the line for a week's work. For a basis there is the look of the region, from some distant point, from a summit climbed last year, perhaps. For a help, there is the compass, but in our hill country we use it little. Partly we go by imperfect glimpses from trees climbed, from blow-down edges, from small cliffs—but chiefly we feel the run of the land, its lift and slope and direction. The string from the grocer's cone unwinds behind—an easy way of marking and readily obliterated when we go wrong. We pay little heed to small difficulties, those are for the trail makers to solve. Only a wide blow-down, a bad ledge, a mistake in general direction, cause us to double back a bit and start afresh. . .

"Making trail is the more plodding work; yet has reliefs and pleasures of its own. Each day, as the gang works along the string line, problems of detail arise. Ours is no gang of uninterested hirelings. If the line makes a suspicious bend, the prospectors have to explain or correct. . .

Decision made, the gang scatters along the line, each to a rod or two, for we find working together is not efficient.[1]"

As has already been said, a club ordinarily will find occasion to do some work of physical preparation of its pedestrian routes. Highways are ordinarily beyond control, but byways are not. The opening of trails, cutting away of briars and windfalls, making the footing sure for a man under a pack, the building of footways and handrails in dangerous places, the cleaning of springs and providing water basins and troughs, the marking of trails—all these matters are such as manifestly should engage a club's energies.

Trail making is by no means a simple matter. The successful trail-maker (and trails should be successfully made) must be expert in woodcraft; he must understand topography—the "lay of the land"; he must know from what side to approach a summit, how best to pass a valley—whether to go around or through it. With knowledge of these matters, his occupation is a most interesting one. Irresponsible and unauthorized trail making should be discouraged.

A word of caution is, "Do, but don't overdo." Particularly is this word of caution to be carried in mind in the matter of blazing trails. Let the marks be sufficient, and no more; let them be as inconspicuous as is consistent with their purpose. In marking trails, don't blaze trees, nor deface objects of interest and beauty. The best trail mark is a colored arrow, affixed to tree trunk or fence post, or painted on a rock face. Such an arrow may, by color, position, and legends displayed upon it, afford as much information as

[1]Nathaniel L. Goodrich, "The Attractions of Trail Making," in *Appalachia*, Vol XIV, No. 3, page 247.

may be desired, about route, distance, elevation, detours, springs, and other matters.

Resting places may be built; pavilions, perhaps, in the woods, where walkers may have lunch under protection from rain. Or, when conditions justify, houses may be built and equipped, to afford food and lodging. In this connection, the *alpenhütten* elsewhere mentioned (page 106) will come to mind. In other places, tents may be erected for the summer, and caretakers employed.

In case a club has under its care a wide extent of wilderness—as has the New York Section of the Green Mountain Club, for example—a ranger will be employed, and his duties will include the care of trails, prevention of fires, and protection of property. He may, if expedient, be constituted game warden also.

"Some of us have been blessed of the Gods, permitted to make trail in the timberline country of the Mt. Washington range. Everyone who has tried it is unhappy till he is doing it again. That is why there are so many trails there. I came rather late; my experience in that fascinating country has been little more than that of the common or idiotic tramper, scuttling from hut to hut on schedule. Always, summer or winter, I am glad to be starting for timberline, and content when there. When, after the long climb, I suddenly realize that the trees are lowering fast, that underbrush has vanished, that a sensation of altitude and space is pressing for conscious recognition, I feel a lift and urge—timberline again!

"And what is timberline? It is the level at which the mean annual temperature—yes, but it is the sweep of vast spaces, the drift of cloud-shadows, the infinite gradations of distant color.

It is the hiss of wind in the firs, the strain against bitter gusts, the keen concentration to hold the trail through dense and drifting fog. It is the plod and lift under the pack, the crunch of creepers, the slow struggle through tangled scrubs."[2]

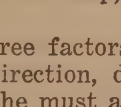
Map Making

Maps of unmapped regions should be prepared.

Study a good map—a quadrangle of the U. S. Geological Survey, for instance. Note what things are represented, and how representation is made: study the map, until it is thoroughly understood.

There are three factors with which the map-maker deals: direction, distance, and elevation. With the first, he must always reckon, and usually with the second and the third as well.

Direction is fundamental. Suppose there are three dominant points in the area to be mapped, relatively situated as here indicated.



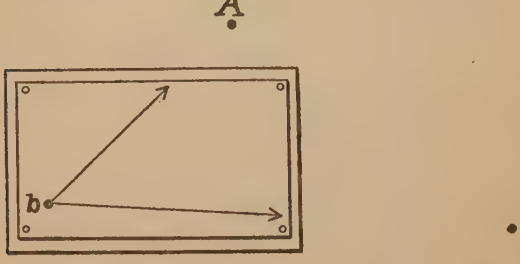
The first problem is, to get those points set down on paper accurately, in proper relative positions.

The map-maker begins, say, at *B*. He has provided himself with a *sketching board*, having a

[2]Nathaniel L. Goodrich, *ubi supra.*

sheet of paper tacked upon it, and with a ruler and a *pencil*. He sets his board up and carefully levels it. He then marks upon the paper a point *b* which in the completed map is to indicate this station *B* of first observation—the point where he now stands. Knowing in a general way the area which he wishes to map, and observing from his station the directions in which the distant objects *A* and *C* lie, he so places point *b* that his paper will afford space for the intended map.

The map-maker then lays his ruler upon the paper, brings its edge close to point *b*, and sighting from point *b* on the paper to the distant object *A*, turns the ruler until its edge coincides with the line of sight. Then he draws upon the paper a line or "ray" from point *b* toward object *A*. In like manner he sets his ruler again and draws a second ray, from *b* toward the distant object *C*, thus:

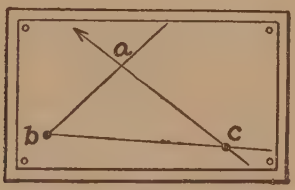


Having fixed point *b* and drawn the two rays *b*-*A* and *b*-*C*, the map-maker leaves station *B* and goes to either of the other points: to point *C*, say. He there sets his board up again, and levels it carefully as before. He turns the board until, sighting along the previously drawn ray *C*-*b*, the now distant station *B* is exactly covered.

Then he lays the ruler again upon the paper, and turns it until, sighting along its edge, distant object *A* is exactly covered. He then draws a ray along the edge of the ruler thus:

A

B



The points *a* and *c*, where this ray intersects the two previously drawn rays, are the presentment of the points *A* and *C* in the area under observation, and a map of the area is begun.

These three points may be mountain summits, trees, telegraph poles, chimneys, or any other conspicuous features of the landscape, and they may be distant one from another 50 miles or 500 yards; they are set down on paper in their true relative positions; they are *mapped.*

In the making of the map thus far, one and only one of the three factors mentioned above has been taken into the reckoning: the factor of *direction,* namely; and the resulting map is drawn to an unknown scale. It is drawn to *some* scale, of course; there is *some* ratio between its distances and the distances at which the objects stand apart, but the ratio is unknown. It may be determined: the distance from *B* to *C* may be measured, and the distance *b-c* on the map may be measured, and the ratio of the two distances ascertained. That ratio is the scale to which

the map is drawn. Thus the second factor, that of *distance*, enters in. It may be reckoned with from the beginning.

Suppose the two points *B* and *C*, above mentioned, to be signal towers on a straight stretch of railway, and the point *A* to be the chimney of a house standing by the side of a wagon road which crosses the railroad at *C*. The map-maker, having at *B* set down the data described above, in proceeding to *C*, paces the distance from *B* to *C*, and finds it to be, *e.g.*, 3,500 feet. He has previously determined what the scale of his map is to be: say, 1 inch to 1000 feet. He then carefully lays off on ray *b*-*C* 3½ inches from the point *b*, and thus he fixes point *c*. He then sets up his drawing-board at *C;* but, instead of shifting the ruler freely upon the paper, he sights from point *c* to distant object *A* and brings the edge of the ruler into coincidence with the line of sight. He draws along the edge of the ruler the ray *c*-*A*, which, intersecting the previously drawn ray *b*-*A*, gives him the point *a*.

The railroad from *b* to *c* may be indicated thus,

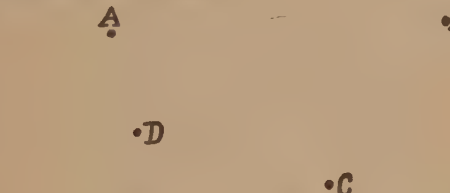
and the highroad from *c* to *a* represented by two closely spaced parallel lines. (The conventional signs for various features of topography may be found on the back of a U. S. Geological Survey quadrangle.) On the way from *B* to *C* there may be a bridge, crossing a stream. The map-maker, pacing the distance, will, without stopping or interrupting the swing of his stride, note the number of paces from *B* to the bridge, as well as from *B* to *C*. He will then have the figures, and can accurately place the bridge upon his map.

He now has a map of a length of railroad and

of a length of intersecting highway, drawn to the known scale of $1'' = 1000'$.

And, be it noted, this has been accomplished without visiting the point *A* at all.

Suppose now there be a haystack *D*, and a tree on a hilltop *E*, situated with respect to the points already considered thus:



They may be mapped in like manner. The map-maker goes successively to any two of the three points *A*, *B*, and *C* from which the object to be plotted (*D* or *E*) is visible; he sets his board at each place, levels it, and turns it until the ray on the map from the point where he stands to another point lies directly in the line of sight to that other point in the landscape. Having so oriented his board, he draws at his successive stations rays in the direction of the object to be mapped (*D* or *E*.) The point *d* or *e* where those rays intersect will be the mapped location of the object.

Proceeding thus, the outstanding features of the area may be mapped, one after another. The intervening details may be filled in, freehand.

It will have been remarked that only very simple apparatus is required for map making: the *sketching board* may conveniently be mounted on a tripod, with provision for turning it evenly and surely. Boards so mounted and intended for the very purpose may be had of dealers in drafts-

men's and surveyors' supplies. A *level* should be provided, for use in setting the board up. The *ruler* will be graduated to inches and fractions of inches, if the map is to be drawn to predetermined scale. In pacing, one must carefully count his strides. A *pedometer* may be used, but a pedometer is a sort of toy; it requires to be carefully adjusted to the stride of the user, and is hardly worth while for any purpose. It may be convenient in pacing to use a *tally register*, and so relieve one's self of the necessity of keeping count.

The value of a map is vitally dependent on the accuracy with which it is made. Measurement and observation should be repeated, and errors eliminated by averaging variant readings.

Nothing has yet been said about a *compass*, and a compass, though not necessary, is so serviceable as to be almost indispensable. With a compass one can not only do, and do more expeditiously, what has thus far been described; he can do some things which could not otherwise be done.

A sketching board is ordinarily provided with a compass, set near its upper margin, and bears also an orientation line passing through the compass. The board is set up and leveled and then turned until the orientation line coincides with the line on which the needle points. At each station the board is oriented, not by sighting along penciled rays, but always in the manner described, by bringing it to a truly north and south position. In other respects, the plotting is performed in the manner already described.

Orientation by compass is advantageous in this respect: given two points, as *a* and *b*, on the map, the map-maker may plot a third point, as *D* for

example, while standing at *D*, and without being obliged to go either to *A* or to *B*. He sets up his board at *D*, levels it, and orients it; he sights and draws rays through points *a* and *b* in line with the objects *A* and *B* as they appear from his point of observation, *D*. The point *d* of intersection of the rays will be the station *D* plotted.

A north and south line may be drawn upon the map, and then the user, wherever he may be in the area, if only he has in view two known points and can identify them on the map, can "find" himself. He orients the map by compass, fixes upon the map and in the manner indicated his point of observation, and may then observe the distance and direction of any other point in the area, whether visible or not.

The measurement of distance by *pacing* has been noted. Practice is requisite, before one can so measure distance accurately. When the greatest precision is desired, a bicycle wheel equipped with a cyclometer may be rolled over the course, or a surveyor's chain may be used, or even a tape line.

The measured line *B-C* of the map begun as above described is the base line of the map. It should be carefully chosen, carefully measured, and carefully plotted; for all the rest of the map will, in accuracy, be conditioned on the accuracy with which this base line is drawn. In location it is preferably (though not necessarily) situated near the center of the area to be mapped; in length, it is best that it be about one third of the distance across the area. Its terminal points should be conspicuously marked, and widely visible throughout the area; and, for ease and accuracy of measurement, it should lie across

level ground. A reach of railroad is an ideal base.

It will often be the case—generally in mountainous regions—that an adequate level base cannot be found; the terminals *B* and *C* may be eminences unequal in height, and between may lie mountain slope or valley. Now the third of the factors mentioned at the outset, *elevation*, has to be taken into account. It is not the surface distance between the two points *B* and *C* which is to be ascertained, nor even the distance from one point to the other on an air line, but the distance projected upon a horizontal plane—for that is what the map is intended to afford, the *horizontal* distance from point to point. In order to determine this distance, if the ground between be other than substantially level, the distance along the surface must be measured (keeping a straight course by compass if necessary) and the *slope* from point to point must be measured. To determine the angle of slope one may either use a *slope board* or a *clinometer* (an instrument built on the principle of the sextant). Having measured distance and angle of slope, one may betake himself to schoolboy trigonometry and a table of logarithms, to determine the corresponding distance in horizontal plane.

Contour lines (see page 119) pass through points of equal elevation, and are spaced apart according to a predetermined plan, to indicate intervals in elevation of five, ten, or twenty feet, as may be desired. This predetermined contour interval has no necessary relation to the scale to which the map is drawn. Two otherwise identical maps of the same area may be provided with contour lines, one at the interval of five feet, the other at the interval of twenty-five.

A skilled map-maker, observing a slope, is able to sketch contour lines, freehand, with an accuracy sufficient for most purposes. But such skill is the result of much careful measured work.

In plotting contour lines it is best to work, not from line to line—errors of observation then accumulate—but to measure the altitude and the mean inclination of the whole mountain side, and go from the over-all measurements to the minutiae.

In drawing the contour of a mountain, rays may be laid by compass from the summit along ridges and through valleys, and then minute observations may be made along those several lines. The sweep of the contour lines between the points plotted along the rays may be filled in freehand, with the mountain side spread in view.

The data necessary for contour lines may be got by the use of the slope board alone; for, manifestly, at any certain angle, a contour interval of ten feet means a certain distance between successive contour lines. But in plotting contour lines, an *aneroid* is invaluable; with it one measures directly differences in elevation, and measuring thus the altitude of a slope, from bottom to top, the *number* of contour lines requisite may immediately be known; it remains to determine their *distribution.* Here observation, calculation, and experience combine to afford the result.

An aneroid should be used only under settled conditions of weather; and, even so, correction should be made, when possible, by taking the average of many readings of the same range.

It is not necessary to go afield with sketching board and its accessories. A map-maker who has

taught himself a well-regulated stride may, when equipped with compass and notebook (and, if conditions require it, with an aneroid), collect all the necessary data; and then, subsequently, at home he may draw his map. It should here be said that, if one is going to gather data for map making after the manner just suggested, his compass should be one having a delicately mounted needle. It may advantageously be equipped with sights, and the scale should be reasonably large and the graduation minute. It should, in short, be a surveyor's compass.

For more explicit instruction, the reader is referred to the manuals on Military Map Making. One by Major C. O. Sherrill, published by George Banta Publishing Company of Menasha, Wisconsin, is excellent. It should, however, be remembered that the ideal military map is one for particular needs, of maximum accuracy, based on a minimum amount of observation; timesaving is an important factor. Making proper allowance, the military manual affords all needed instruction and advice.

Publishing of data

Descriptions of routes should be prepared, illustrated with maps, if necessary, and should be made available to those who wish to use them, whether members of the club, visitors from a distance, or the general public. For a club, rightly conceived, is, within its sphere, a public benefactor, and its policy should be always to enlarge its usefulness.

A proper description of a route should give, (1) distances from start to finish, as well as from point to point along the way; (2) approximate time requisite to walk each stage. (Here

it may be noted that Baedeker's famous guidebooks err on the safe side, and give very liberal time allowance in describing walking tours.) The description should further give (3) elevations, where range in elevation is appreciable, with note of steep ascents and descents; (4) the nature of the surface; (5) stopping places for rest and refreshment and springs; (6) such matters of caution as the particular route may require, in regard to dangerous places, heavy roads, obstructions, and the like; (7) objectives and points of particular interest. Recommendations should be made on such matters as preferred season, special equipment, need for guides, and incidental expenses. Descriptions should be concise, easily intelligible, and should be at once accurate and inviting.

A handbook of routes of the region may well be prepared, and in such a handbook descriptions of particular walks may be prefaced by such general statements regarding topography, science, history, and sport, as are applicable to the whole region. Such general matters may, however, be published in leaflet form, and separate leaflets be prepared and published for the several pedestrian routes in the region.

An excellent specimen handbook is "Excursions Around Aix-les-Bains," mentioned in the Bibliography (page 148).

It has just been said that the descriptions of routes should be published and distributed. They may be printed under the imprint of the club, or, more economically, they may be published in the local newspaper, and extra copies, separately printed for distribution by the club, may be procured by arrangement with the printing office. If the club be a small one and young, and the

cost of printing too great, at least typewritten copies of descriptive matter and blue prints of maps should be available.

In addition to such descriptions of its own region, a club should similarly prepare and make available other routes traversed by its members in other and undeveloped regions.

Maintaining a bureau

A club should have a place where its data are filed, available to those who wish to consult them. This place should be a distributing point for the club's publications. If the region has already been mapped by the Geological Survey, the club should lay in a supply of the quadrangles covering the region, sufficient to meet the needs of applicants.

A *library* should be maintained, or a *bibliography* at least, to which the members of the club may have access, to acquaint themselves with all that concerns the art of walking, the choice of route, and the sources of enjoyment along the route chosen. Cooperation in this regard will readily be accorded by any local public library or museum of natural history.

In such manner a walking club becomes a source of information for visiting pedestrians. Out of the wider relationships so established will come increased membership and livelier interest. Incidentally, it will have become apparent to one who reads these pages that the organization—though, by recommendation, kept as simple as possible—will, in an early stage of development, include an office with a secretary in charge. The library may be conducted, perhaps in the secretary's office, perhaps in the rooms of a general public library. Club rooms or a club house will

be maintained only under exceptional circumstances.

Conducting hikes.

Hikes will be of two or three sorts: first, afternoon hikes, on Saturdays or Sundays, perhaps weekly throughout the greater part of the year, perhaps at less frequent intervals, or during spring and fall only—such matters depend on locality and circumstances. Second, there will be less frequent over-night hikes—perhaps two or three in the spring and as many more in the autumn. And, third, there will be the annual tour of two or three weeks' duration, in a chosen region. Some observations applicable to all these are the following:

Rules for hiking

Hikes should be carefully prepared and adequately carried out.

Don't walk in a herd; to do so is tiresome; and, when the novelty is gone, failure is sure to follow. Divide larger companies into groups, each group numbering preferably not more than six.

See that strong and feeble walkers are not grouped together.

Bring together, so far as may be, people of common interests—bird-lovers in one group, geologists in another, historians or antiquarians in another.

Let there be a leader for each group.

The general outline of the trip, in case the party numbers more than two, should be determined in advance and adhered to. Otherwise, contradictory suggestions regarding the route to be followed are likely to arise, and argument to follow. This is to be avoided.

The leader should have always in mind the physical endurance of the weakest member of his party and govern accordingly. One tired and querulous person may be a kill-joy for all. It is not necessary that every group traverse the same route, nor that all should walk at equal speed.

Don't allow racing, nor loitering, nor too much picnicking.

In traversing highways pedestrians will walk two or three abreast; but when walking single file, as on woodland trails, companions will walk most comfortably at intervals of two paces.

Walkers should travel quietly, especially when passing through villages.

See that property rights are respected; there should be no trespassing on forbidden land.

Guard most carefully against fire. Mr. Enos A. Mills says:[8]

"Since the day of 'Pike's Peak or bust,' fires have swept over more than half of the primeval forest area of Colorado. Some years ago, while making special efforts to prevent forest fires from starting, I endeavored to find out the cause of these fires. I regretfully found that most of them were the result of carelessness, and I also made a note to the effect that there are few worse things to be guilty of than carelessly setting fire to a forest. Most of these forest fires had their origin from camp-fires which the departing campers had left unextinguished. There were sixteen fires in one summer, which I attributed to the following causes: campers, nine; cigar, one; lightning, one; locomotive, one; stockmen, two; sheep-herders, one; and sawmill, one."

See to it that proper regard is had for public interest and welfare; lunch boxes, paper, and refuse should be collected and destroyed; springs

[8] "Wild Life on the Rockies," page 209.

should be kept scrupulously clean; the gathering of wild flowers should be indulged in sparingly; plants and trees should not be mutilated; nor monuments defaced. The trail should be left unmarred, for those who follow.

Do not permit irresponsible trail-blazing.

Discourage the carrying and use of firearms; they should under no circumstances be permitted on an organized hike.

Do not permit the rolling of stones down declivities.

On the conduct of mountaineering parties, Professor William Morris Davis writes, in "Excursions around Aix-les-Bains":

"Do not make high mountain ascents alone. . . . Excursions are best made in small parties of three or five. If a large party sets out, it should be divided into squads of ten or fewer members. Those who wish to make the excursion without stopping should join a separate squad from those who wish to stop frequently for photographing or sketching.

"Each squad should, if possible, have an experienced leader; he should make a list of the members, head the line of march on narrow paths, and set the proper pace, slow for ascents, faster for descents; a shrill whistle will aid in summoning his party together. A marshal should follow in the rear to round up the stragglers. Before setting out on a long mountain walk, place the members of each squad in a circle and let each member take note of his two neighbors, one on his right, one on his left, for whose presence he is to be responsible whenever the march begins after a halt: each member will thus be looked for by two others. Once on the road, keep together; those who wander away from their squad cause vexatious delays. The marshal's

report, 'All present and ready to start,' is especially important when a descent begins. If a member wishes to leave his squad after low ground is reached, he should so report to his leader."

Mr. Albert Handy[4] notes another matter, in the following pleasant and sagacious comment upon walking parties:

"A writer on walking has suggested that tramping parties should usually consist of but two or three persons. Having in mind a much hackneyed quotation concerning the trend of a young man's fancy in the spring, and the fact that it seems to have the same trend in the summer, autumn, and winter, I can conceive circumstances in which two would be an ideal number—out of consideration, primarily, not for the two, but for the remainder of the party. But I set down here another precept worthy of commendation: 'twosing' should be sternly frowned upon. In the first place, two 'twosers' are apt to get 'lost'—this in direct proportion to their interest in each other—that is, separated from the rest of the party; and time and tempers are likewise lost, permanently, very likely, in the effort to retrieve the wanderers; while if they happen to be carrying all the lunch, tragic possibilities present themselves."

Instruction about walking—about posture, gait, clothing, and the like—may be afforded in talks before groups of pedestrians, or (often with better effect) individually, by the group leader. Needless criticism and officiousness will, of course, be avoided; it will suffice to provoke and then to answer questions.

Contributions to the literature of pedestrianism will take the form of description of particular

[4] New York *Evening Post*, July 25, 1914.

regions in those respects of interest to pedestrians; it will include descriptions of particular walks, and maps.

Clubs are invited to relate themselves to the League of Walkers (page 137), which in publishing such material will of necessity give preference to what is to be commended to widest interest.

Club Policy

With such activities in mind as normal to a pedestrian club, certain matters of policy may be presented for consideration.

Two tendencies are sure to manifest themselves in any flourishing club: the one toward a limited membership of those who qualify by accomplishing difficult feats; the other toward an indiscriminate membership, including those who are ready to join anything—providing the rest do. Both tendencies are bad. The club should on the one hand require of its members an especial interest in the object of its being, but it should on the other hand avoid exclusiveness. Emulation may be stimulated in other and better ways.

The aim of a club should be to bring home and make available to as many persons as possible the advantages in health and happiness to be derived from the pursuit of this recreation. This is a higher and better aim than to produce phenomenal walkers and mountain climbers—though such may incidentally be produced. It is a higher and better aim than a self-adulating company of those who have perched themselves on alps. Alpine climbing is splendid sport, but the aim mentioned is an ignoble one. Says one moun-

taineer,[5] who is incidentally a delightful writer, with humility:

"I utterly repudiate the doctrine that Alpine travellers are or ought to be the heroes of Alpine adventures. The true way at least to describe all my Alpine ascents is that Michel or Anderegg or Lauener succeeded in performing a feat requiring skill, strength, and courage, the difficulty of which was much increased by the difficulty of taking with him his knapsack and his employer. If any passages in the succeeding pages convey the impression that I claim any credit except that of following better men than myself with decent ability, I disavow them in advance and do penance for them in my heart."

Avoid membership campaigns and such like advertising; a club to be enduring must rest on interest in the intrinsic thing for which the club stands. An artificially created interest must be artificially maintained; genuine natural interest is harmed by artificial interference.

Dues should not be burdensome, discouraging membership, but should be adequate to accomplish reasonable ends, and so tend to enlist and to widen interest.

Attention should center on the primary activities and upon them chiefly money should be spent.

Publications should be sold at cost.

Adequate charge should be made for the use of property. The Alpine clubs of Europe fix small membership fees, and give members preference over non-members in their lodging places. Members enjoy more favorable rates also for meals and lodging. The ideal of the club here should be a nice balance of simplicity, comfort,

[5] Leslie Stephen, "The Playground of Europe."

and adequacy; no waste, no extravagance, no surplus funds.

Club *emblems* are often adopted and worn. As in other sports, emulation may be awakened by the offer of *trophies*. These may be won in competition, or, as is usually preferred, by walking a certain number of miles in a day, or by covering a certain distance in a two-weeks' hike, or the like.

In any case, organization should be simple and inconspicuous: the wheels should turn automatically.

If acquisition of property is contemplated, incorporation will ordinarily be desired, and trustees will be chosen.

A Club Constitution

For the benefit of those who may consider organization, a copy of the by-laws of the Appalachian Mountain Club is, by permission, here inserted.

BY-LAWS

Article I

The Corporation shall be called the Appalachian Mountain Club.

Article II

The objects of the Club are to explore the mountains of New England and the adjacent regions, both for scientific and artistic purposes; and, in general, to cultivate an interest in geographical studies.

Article III

MEMBERSHIP

1. There shall be three classes of membership, to be known as active, corresponding, and honorary.

2. Active members only, except as hereinafter provided, shall be members of the Corporation.

3. Elections to active membership shall be made by the Council, and the affirmative votes of at least four-fifths of the members present and voting shall be necessary to election.—Nominations, in the form of a recommendation, shall be made in writing by at least two members of the Club and forwarded to the Recording Secretary. Notice of such nominations shall be sent to all active members, who shall have two weeks from the date of mailing in which to express to the Council their objections, and no person shall be admitted to membership against the written protest of ten members of the Club.

4. Corresponding members may be elected from among persons distinguished in the fields of mountaineering, exploration, and geographical science, or for public spirit in the conservation of natural resources or in other interests of which the Club is an exponent. Their election shall be in the manner prescribed for that of active members, except that the names of candidates shall first be submitted to a special committee.—Honorary members, not to exceed twenty-five in number, may be elected in the same manner from among the Corresponding members.—Corresponding and Honorary members shall not be members of the Corporation, unless they were such at the time of their election, and shall not be subject to any fees or liabilities whatever.

5. The annual dues shall be four dollars, payable January first. Each candidate elected to active membership shall pay an admission fee of eight dollars, and on such payment shall be exempt from the annual dues of the current year.—The admission fee and annual dues of members under twenty-one years of age shall be half the above rates.—Members elected later than September of any year shall be exempt from annual dues of the year following.—Persons elected to active membership shall pay the admission fee within two months of their election

(which payment shall be considered to be an assent to these By-laws), otherwise the election shall be void.

6. Any person elected to active membership may become a life member at any time upon payment of fifty dollars, and shall thereafter be subject to no fees or assessments. Such sum shall include payment of the admission fee or dues for the current year. Active members who have completed thirty years of membership, or who have completed twenty years of membership and have reached seventy years of age, shall become life members upon giving written notice to the Recording Secretary, or by vote of the Council.

7. Bills for annual dues shall be sent to all members on or near January first, and those whose dues are unpaid on April first shall have notice of the fact sent them by the Treasurer. He shall send, on May first, to members whose dues are still unpaid, notice referring to this article, and those in arrears on June first shall thereupon cease to be members, which fact, in each case, shall be certified in writing by the Treasurer to the Recording Secretary, who shall enter it of record; but such membership may be revived by the Council in its discretion upon payment of past dues. The President and Treasurer are authorized to remit any fee *sub silentio*, when they deem it advisable.

8. If the Council by four-fifths vote shall decide that the name of any member should be dropped from the roll, due notice shall be sent to such member, who shall within two weeks have the right to demand that the matter be referred to an investigating committee of five active members of the Club, two to be appointed by the Council—but not from its own number—two to be selected by the member, and the fifth to be chosen by these four. In the absence of such a demand, or if a majority of this committee shall approve the decision of the Council, the name of the member shall be dropped, and there-

upon the interest of such person in the Corporation and its property shall cease.

Article IV

ADMINISTRATION

1. The officers of the Club shall be a President, two Vice-Presidents, Recording Secretary, Corresponding Secretary, Treasurer, four Departmental Councillors, and two Councillors-at-Large, and there may be an Honorary Secretary. These officers shall form a governing board, to be termed the Council, and this body shall elect new members, control all expenditures, make rules for the use of the Club's property, except as hereinafter provided, and act for its interests in any way not inconsistent with these By-laws. Five members of the Council shall form a quorum.

2. The President shall preside at the meetings of the Club and of the Council, and shall appoint (with the advice and consent of the Council) the several standing committees. One of the Vice-Presidents shall act in the absence or disability of the President.

3. The Recording Secretary shall be the Clerk of the Corporation, and shall have charge of the muniments of title and of the corporate seal. He shall keep a record of all the proceedings of the Club and Council, give notice to the members of the time and place of meetings, and prepare each year a report of the Club and Council to be presented at the annual meeting.

4. The Corresponding Secretary shall conduct the correspondence of the Club with kindred organizations and with Honorary and Corresponding members, keeping proper files and records of the same, and shall prepare a report for the previous year to be presented at the annual meeting.

5. The Treasurer, under the direction of the Council, shall collect, take charge of, and disburse

all funds belonging to the Club, except such as are in the hands of the Trustees of Special Funds or by legal restriction are under separate control. He shall keep proper accounts, and at the annual meeting, and at other times when required by the Club or Council, present a report of its financial condition.

6. The four Departmental Councillors shall represent severally the departments of Natural History, Topography and Exploration, Art, and Improvements. It shall be their duty to conserve and foster the interests of their several departments, and they are authorized to call special meetings of members interested therein, at which they shall act as chairmen, and to appoint departmental committees, subject to the control of the Council. They shall present at the annual meeting reports of their respective departments for the year.

7. There shall be a Board of Trustees of Real Estate, consisting of a member of the Council, to be designated by it, and four other members of the Club, one being elected annually by ballot to serve four years and until his successor is chosen.—These Trustees shall elect annually from their own number a chairman and such other officers as may be required, and may employ such assistance as they shall find necessary. They shall administer and manage any real estate which may be held by the Club as a public trust; subject, however, to the general supervision of the Council.—Any real estate other than public trust reservations to which the Club holds title shall be managed under the direction of the Council, but nothing herein shall be construed to mean that the management of such property may not be delegated to the said Board of Trustees or to a standing committee created for the purpose.—No real estate shall be acquired or title to the same accepted except by vote of the Council upon the recommendation of this Board.—The Trustees of Real Estate shall make to the Club at

the annual meeting a report in writing relative to the property committed to their care, together with a statement of the finances connected with their trust.

8. There shall also be a Board of Trustees of Special Funds, consisting of three members of the Club, one being chosen by ballot annually to serve for three years and until his successor is elected. They shall choose their own chairman. The Treasurer of the Club shall not be eligible to election upon this Board.—All permanent endowments and funds of a permanent or special nature (unless otherwise legally restricted), as well as the Reserve Fund hereinafter provided, shall be entrusted to these Trustees, and they shall have power to make, change, and sell investments.—All moneys received for life membership, and such other sums as may be received or appropriated for this special purpose, shall be known and invested separately as the Permanent Fund, of which the income only shall be expended.—There shall also be a Reserve Fund to and from which appropriations may be made by not less than five affirmative votes at each of two meetings of the Council, notice of the proposed action having been given on the call for the second meeting.—At each annual meeting, and at such other times as the Club or Council may request, the Trustees of Special Funds shall make a written statement of the condition of each of the funds in their hands.

9. The fiscal year of the Club shall end on December 31. The Council shall at the close of each year employ an expert accountant to audit the books and accounts of the Treasurer and of the Boards of Trustees, and shall present at the annual meeting the written report of his findings; it may also cause to be audited in the same manner the accounts of other agents and committees of the Club.

10. The following Standing Committees shall be appointed: on Publications; on Field Meetings and Excursions; on Legislation; on Active Membership;

and on Honorary and Corresponding Membership. These Committees shall consist of not less than five members each, and members of the Council shall be eligible to appointment thereon. They shall be vested with such powers as the Council sees fit to delegate to them, and nothing herein shall be construed as prohibiting that body from appointing such other committees as may be required.

Article V

Election of Officers

1. The Officers and Trustees shall be chosen by ballot at the annual meeting, and may be voted for on one ballot. They shall hold their offices until the next succeeding annual meeting, or until their successors are chosen in their stead; but any vacancy may be filled by the Council, subject to confirmation by the Club at its next regular meeting.—The President and Vice-Presidents shall not be eligible for more than two consecutive terms of one year each, nor the Councillors for more than three consecutive years; the Honorary Secretary may be elected for life.

2. A Nominating Committee of at least five active members shall be appointed by the President, with the advice and consent of the Council. No elective officers of the Club shall be eligible to serve on this committee. The names of said committee and a list of the offices to be filled shall be announced in the call for the October meeting, with a request for suggestions for nominations from members of the Club. The list of candidates nominated by the Committee shall be posted in the Club Room and published with the notice for the December meeting.—Twenty-five or more active members desiring to have a candidate or candidates of their own selection placed upon the official ballot may at any time prior to December 20 send their nominations, duly signed by them, to the Recording Secretary, and the names of such candidates, in addition to those presented

by the Nominating Committee, shall be printed on the call for the annual meeting and upon the ballots. No person shall be eligible to office unless nominated in accordance with the foregoing provisions.

Article VI

MEETINGS

The Council, or the officers to whom it may delegate this power, shall call a regular meeting of the Club in Boston in each month except between June and September inclusive, and special and field meetings at such times and places as may seem advisable. The January meeting shall be the annual meeting, and shall be held on the second Wednesday of that month. Fifty members shall form a quorum.

Article VII

AMENDMENTS

These By-laws may be amended by a vote to that effect of at least three-fourths of the members present and voting at two consecutive regular meetings of the Club, notice of the proposed change having been sent to all active members.

Juvenile Clubs

What has been said of the conduct of clubs generally will, so far as it is worth the saying, afford sufficient suggestion to school teachers, secretaries of young men's and young women's Christian associations, and other welfare workers. Organization is not the important thing. The important thing is to direct the minds and activities of young people into wholesome and educative channels.

In dealing with boys and girls the educational factor in pedestrianism becomes more important.

Lessons in biology, geology, astronomy, and history are more adequately taught and more thoroughly learned, when teacher and pupil come face to face with the actual physical objects to which study is directed. And the way opens wide here, not for natural and social science, merely, but for seemingly more remote subjects: surveying, for instance, and cartography; appreciation of architecture and of other fine arts; sketching and English composition. Incidentally, powers of observation, memory, thought are quickened, and physical well-being promoted.

Even in such minor matters as clothing and shoes, a good deal of folly among boys and girls may be dissipated, to the substantial benefit of these same girls and boys when older grown.

The handbook of the Boy Scouts will be found particularly suggestive and helpful to those in charge of walking for young people.

Much wider use is made in Europe than in this country of excursions as a feature of school life; here as well as over there, excursions afoot may be encouraged. But teachers must themselves become pedestrians, before such advantages and enjoyment as walking affords will become available to school children generally.

The League of Walkers

The plans for the League, as thus far developed, are:

To encourage the organization of walking clubs, and to cooperate with such organizations, aiding them in making their proposals inviting.

To maintain a Bureau of Information, where specific advice about particular walks and particular regions will be preserved and made avail-

able to all applicants. Particular attention will be given to collecting data concerning scenery, geology, history, and, generally, matters of interest on particular walks.

To publish a "blue book" or guidebook for pedestrians.

To give advice regarding clothing, equipment, training, etc.

To promote inter-Association and other inter-club walking tours.

Certificates will be given to walking clubs which enroll in the League. The cost of enrolment is $1.00, simply to pay for the cost of the certificate.

Members of constituent walking clubs may wear bronze buttons or pins bearing the emblem of the League. These may be procured at a nominal cost at 347 Madison Avenue, New York.

A bronze medallion, to be worn as a watch fob, will be awarded to any one, a member of a constituent walking club, who walks 30 miles in twenty-four hours, or 150 miles in two weeks, or who makes a mountain climb of 3,000 feet in a day. An applicant for a medallion will furnish with his application two letters, in addition to his own, from those best advised, stating the facts as they know them. The secretary of the club of which the applicant is a member (it may be of a Y. M. C. A.) should also write, and his may be one of the two letters required, as just said. If possible, the letters should be written by persons present, one at the start and the other at the finish of the feat. The applicants will pay the cost of the medallion.

A silver medallion will be awarded, at the expense of the League, one each year, (1) to the person who sends to the Bureau the best original

essay on walking, based upon actual experience; (2) to the person who sends to the Bureau the best epitome of a walking tour; and (3) to the person who sends to the Bureau the best photograph taken on a walk.

A silver medallion may be awarded to one who performs some notable feat in walking, or who renders some valuable service in the interest of walking.

Special recognition will be given each year to that walking organization which has rendered the best service to the walking movement.

The emblem of the League is pictured in the design appearing in the frontispiece. The design was modeled by Mr. Royal B. Farnum, Specialist in Industrial Arts in the New York Department of Education, at the instance of Dr. John H. Finley, President of the University of the State of New York.

The desire of the League is to inspire and incite people to get out of doors, to walk regularly and systematically, to cultivate a love for the open, and to develop health and vigor and the joy of well-being.

All organizations interested are requested, for the common good, to communicate with the New York Bureau all data respecting regions under cultivation, and respecting particular walks and tours.

Communications should be addressed to the League of Walkers, 347 Madison Avenue, New York City,

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I will arise and go now, and go to Innisfree,
And a small cabin build there, of clay and wattles made;
Nine bean rows will I have there, a hive for the honeybee,
And live alone in the bee-loud glade.

And I shall have some peace there, for peace comes dropping slow,
Dropping from the veils of the morning to where the cricket sings;
There midnight's all a glimmer, and noon a purple glow,
And evening full of the linnet's wings.

I will arise and go now, for always night and day
I hear lake water lapping with low sounds by the shore;
While I stand on the roadway, or on the pavements gray,
I hear it in the deep heart's core.

William Butler Yeats.

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à la
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